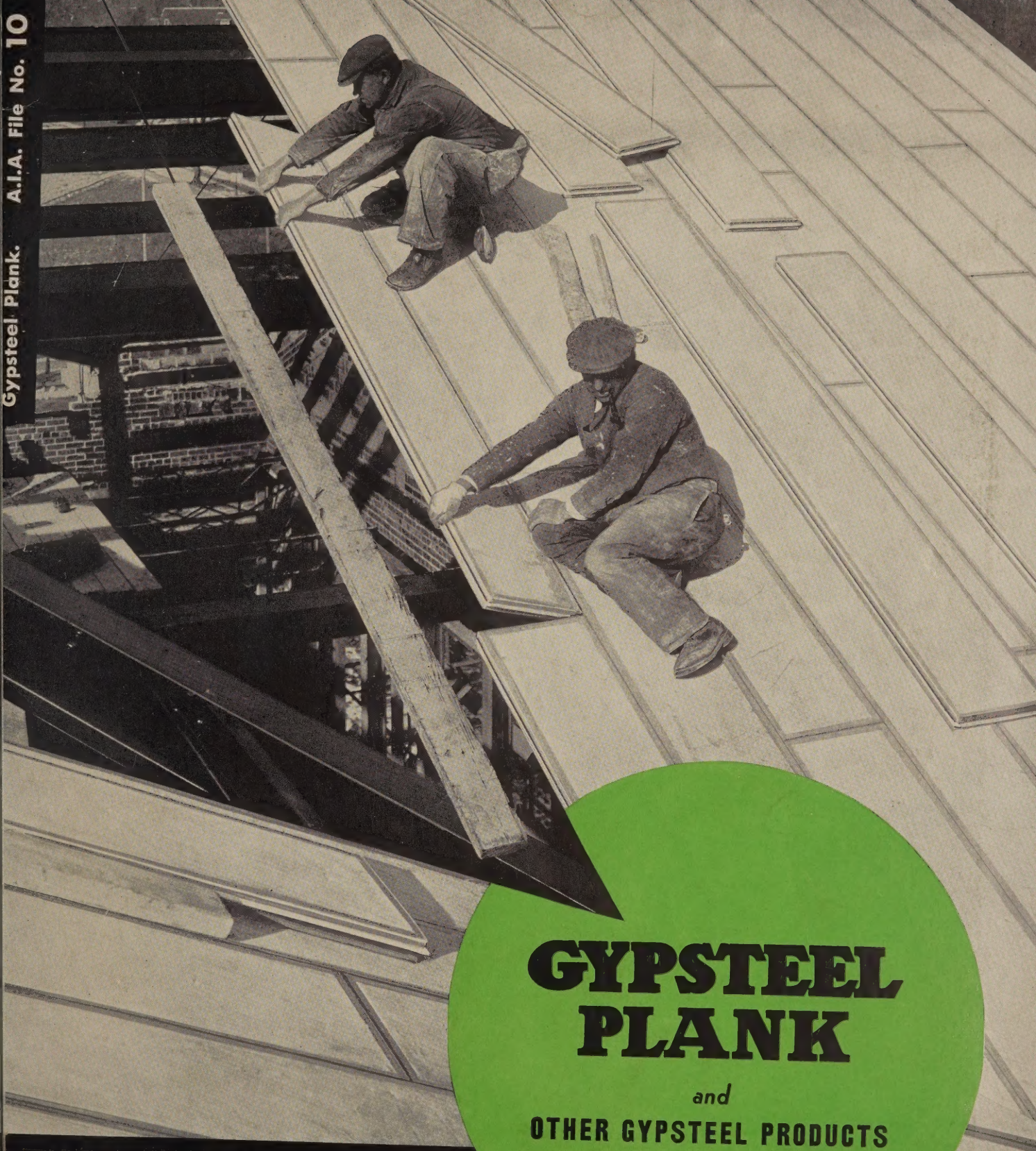
Gypsteel Plank. A.I.A. File No. 10



GYPSTEEL PLANK

and

OTHER GYPSTEEL PRODUCTS

American Cyanamid & Chemical Corporation

MODERN BUILDING PRODUCTS
OF GYPSTEEL GYPSUM

Gypsteel Plank; pre-cast slabs for floors, ceilings and roof decks; partition tile and plasters; plaster board and wall board.

AMERICAN CYANAMID & CHEMICAL CORPORATION
Structural Gypsum Division
30 ROCKEFELLER PLAZA • NEW YORK, N. Y.

OFFICES IN PRINCIPAL EASTERN CITIES

Bulletin 36c

American Cyanamid & Chemical Corporation
Structural Gypsum Division
Its Products and its Services

The products of The Structural Gypsum Division, including pre-cast slabs and Plank for floors and roofs, partition tile, and plaster are identified and marketed by the registered trade mark "Gypsteel." Their use is approved by the building departments of principal cities.

Gypsteel Plank. A structural unit for firesafe floor and roof decks. See pages 5 to 20.

Gypsteel Pre-Cast Short Span Roofs. For application over steel frames in all types of commercial and industrial buildings, schools, hospitals, armories, etc. See page 21.

Gypsteel Pre-Cast Ceilings. A full fireproof system where flat ceilings are desired and for the protection of trusses in theatres, garages, etc. See pages 22 and 23.

Gypsteel Pre-Cast Composite Floor Arch. A fireproof floor system fully approved for 4-hour fireproof constructions by the building departments of principal cities. Installed over beams spaced up to 8-foot centers. See pages 24 and 25.

Gypsteel Gypsum Partition Tile. Available in all regulation sizes and excelling the recognized standards of strength by two and a half times. See page 26.

Gypsteel Gypsum Plasters. A full line of Gypsteel gypsum plasters, including colored, each manufactured under the patented Gypsteel process. See pages 27 and 28.

Gypsteel Plasterboard, Wallboard and Gypsum Lath is manufactured in all standard sizes. See page 28.

Velachrome. A calcium caseinate plastic paint of superior quality for a highly decorative and wear-resistant finish. See page 28.

Our Factory in Linden, N. J., is so located as to serve economically all of the New England, Middle Atlantic, Middle Western and South Eastern States. Of modern design and large capacity, it combines the economies of mass production with a precision of mechanical and chemical control that secures uniformity of quality.

Our Engineering Department is composed of engineers of long experience in steel design and in structural steel shop practice. This department is well qualified to offer suggestions and assistance in the design of steel work which will assure maximum economies in the use of Gypsteel products.

Our Service Department likewise consists of men having many years' experience in the installation of Gypsteel products, who are eager as well as competent to assist builders in solving unusual problems and in obtaining the lowest cost in installing these products.

Installation. American Cyanamid & Chemical Corporation does not contract for the installation of its products. It will, however, obtain for its customers and prospective customers proposals for installing all Gypsteel structural products through its certified erectors.

GYPSTEEL GYPSUM

Modern alchemists have developed a gypsum of unusual character . . .

Chemically, gypsum is described as calcium sulphate combined with two molecules of water of crystallization, expressed by the formula, $CaSO_4$ $2H_2O$. This water is not free moisture but is chemically combined and therein lies the sole reason for the commercial value of gypsum. In manufacture, we simply reduce raw gypsum to a fine powder, drive off part of the water of crystallization, leaving a substance that we might say is "thirsty" for the water we took away from it. This is calcined gypsum. Now, by adding water to it, these crystals that we broke down and dehydrated, reform and revert to their original rock consistency in whatever particular shape we may have chosen to mold them.

We are all familiar with calcined gypsum as plaster of Paris, and as plaster with which the walls, partitions, and ceilings of our homes and offices are invariably finished.

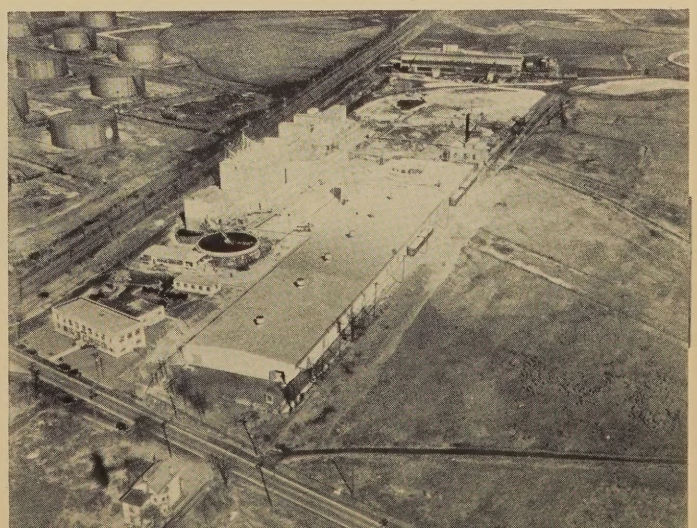
Calcined gypsum is one of the oldest of building materials, and until recent years was manufactured only from rock gypsum, a widely distributed mineral that is mined or quarried. Naturally, mined gypsum contains certain impurities, their character and percentage varying between localities, and even between the different runs taken from the same source. Such fluctuations are reflected in the quality of the finished material. Recognizing these limitations to the manufacture of uniform, dependable products, this corporation has developed the Gypsteel Process of producing calcined gypsum, that results in a product identical in chemical composition with natural gypsum, but controls these variables and gives a product of unusual purity and strength. Under the Gypsteel Process we "manufacture" gypsum, keeping it under complete laboratory control at all times.

While the successful development of the Gypsteel Process to the point where it was commercially practical, required years of research and development, the principles involved are simple and free of mystery. We all know that when the chemist combines two atoms of hydrogen gas with one of oxygen, he produces water, identical chemically with the finest found in nature. In a manner, fundamentally as simple, scientists found a way to combine the basic elements to form gypsum. The manner and procedure for doing this was patented and all Gypsteel Gypsum is manufactured in accordance with these patents.

One of the many benefits of the Gypsteel Process is the greater strength and hardness of the pre-cast slabs made from this gypsum, and their greater ability to withstand job abuse and exposure to the elements. For while Gypsteel Gypsum is not waterproof, its strength is not permanently affected by water. A slab of Gypsteel Gypsum may be wetted repeatedly, or even frozen, and when dried out will be found to have regained its original strength. Even when saturated with moisture, slabs of Gypsteel Gypsum will not crumble or disintegrate.

This unusual quality is illustrated in the acres of buildings at our Linden, New Jersey plant, where the outside walls of all buildings, except the office, are built of 3″ Hollow Gypsteel Partition Tile. Some of these walls are nearly 90 feet high. They have not been waterproofed or treated in any way. These buildings include a storage warehouse for gypsum plaster, a material that is most sensitive to dampness. The only effect which years of exposure has had upon these walls is to make them harder.

Floors and roofs of gypsum composition have been in use in this country for about 40 years, but their widespread acceptance has been a comparatively recent development, largely attributable to the research and improvements which have been sponsored by this company. The name Gypsteel is identified not only with an improved type of gypsum, but more especially with the design of factory-cast units based upon sound engineering principles that assure a uniformity and economy that are only possible in mass factory production. Foremost among these products has been Gypsteel Plank, offering, at surprisingly low cost, all of the advantages of permanent masonry construction with the lightness and insulating qualities of gypsum and the ease of application and adaptability of ordinary lumber.



The Linden, N. J.
Plant of the
Structural Gypsum Division

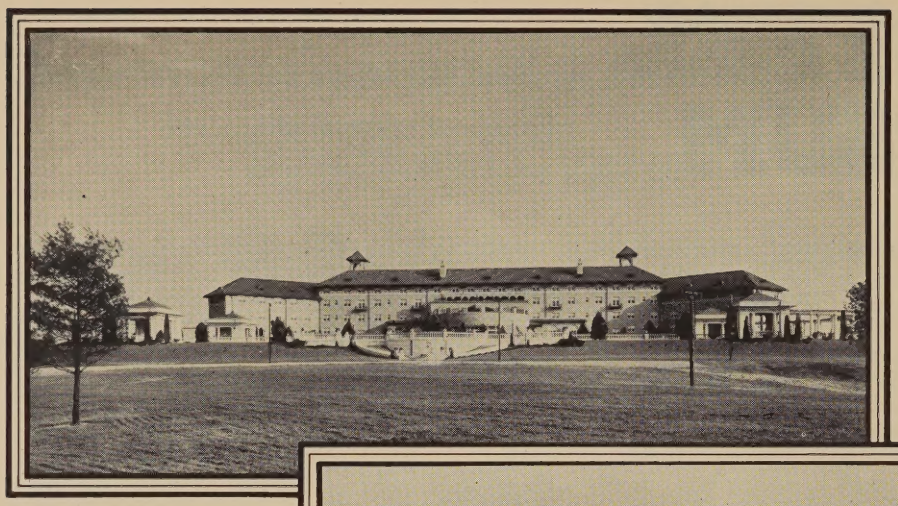


Photo by Wurts Bros.

Hotel Hershey, Hershey, Pa.

Hershey Lumber Products
Architects and Builders

In this luxurious resort hotel, 135,000 square feet of Gypsteel Plank were used for floors. Gypsteel Precast Ceilings and Beam Covering fireproof all supporting steel. The floors of all terraces are built of Gypsteel Precast Composite Arches.

Hayfield House

The estate of
John N. Conyngham Esq.
Near Wilkes-Barre, Pa.

Francis A. Nelson, Architect
Skinner, Cook and Babcock,
Builders

Plank floors were used for this beautiful fire-safe home.

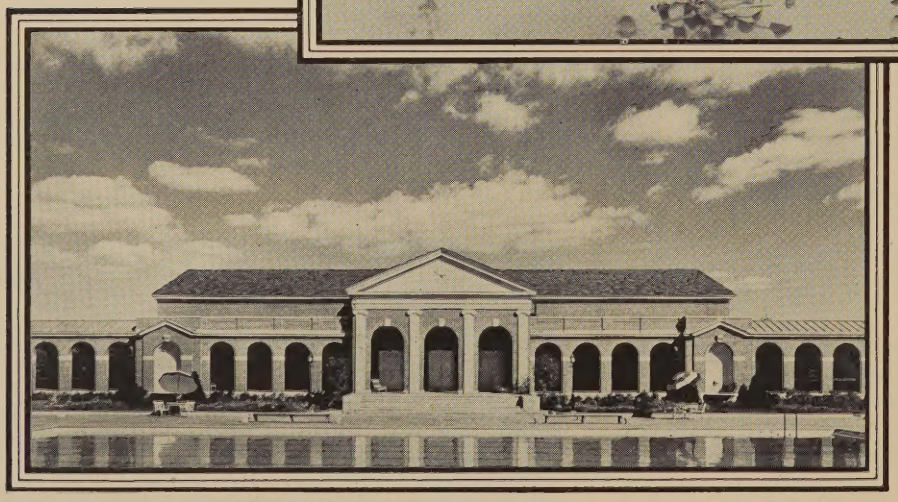


Photo by S. H. Gottscho

The Athletic Group
Saratoga Springs Spa
Saratoga, N. Y.

Dwight James Baum, Architect

Louis Keil, Builder

Gypsteel Plank roofs.

GYPSTEEL PLANK CONSTRUCTION

An Efficient Factory Made Unit of Fire Resistive and Insulating Gypsteel Gypsum for Floors and Roofs

Behind the development of Gypsteel Plank* lies the conception of pre-cast units of gypsum that may be used like lumber. The success in realizing this ideal is proved through the widespread acceptance of Plank by leading architects, engineers and builders. These users have placed their stamp of approval upon Plank by repeatedly specifying it not only for many buildings of the finest types but also for countless others where price was the first consideration.

Economical for all Types of Buildings

Gypsteel Plank retains the fire resistive and insulating properties that have always been associated with gypsum. It also has a degree of permanence and freedom from excessive maintenance cost that is expected of heavy masonry constructions. It is therefore not surprising to know that Plank is being used in important government buildings, prominent hotels and clubs, leading institutional buildings and by well known firms in every branch of industry. Plank has found equal favor among those who must build economically. It is low in first cost, as well as upkeep, and through its simplicity saves greatly in field labor. Being light in weight and adaptable to varying conditions it permits a freedom in the design of the supporting frames that leads to the utmost economy.

Handles Like Wood

Gypsteel Plank is manufactured in forms and sizes that are similar to lumber and that are easy to handle. Plank may be cut, sawed or bored with ordinary carpenters tools. Little experience is required for its successful application.

Accepted by Building Departments of Principal Cities

Plank has been subjected to rigid tests by many laboratories of national standing including the U. S. Bureau of Standards. As a result it is recognized and accepted by all cities in the Eastern territory, our normal marketing area.

Maximum Strength with Minimum Weight

The design weight of 2″ Plank is only 12 pounds per square foot, 3″ Plank, 16 pounds, more nearly approaching the lightness in weight of wood than any generally accepted construction of a permanent type. Despite this lightness, strength is not sacrificed. For example Plank may be used on roofs up to spans of 7 ft. and yet will carry the maximum live load of 40 pounds demanded by most building departments with a factor of safety of more than eight. Comparable safety is offered for floors in light occupancy buildings on spans up to 5 feet. For floors, Plank finds its most common use in combination with light steel joists on somewhat shorter spans, where its strength is usually limited only by the capacity of the joists.

Not Affected by Weather

Plank may be laid in any weather that men will work. There is nothing to pour. No mortar is used that will be affected by freezing temperatures. Exposure to the elements does not permanently affect the strength of Gypsteel Plank.

Gypsteel Plank is designed for use in all classes of wood or steel-frame buildings. It is recommended for:

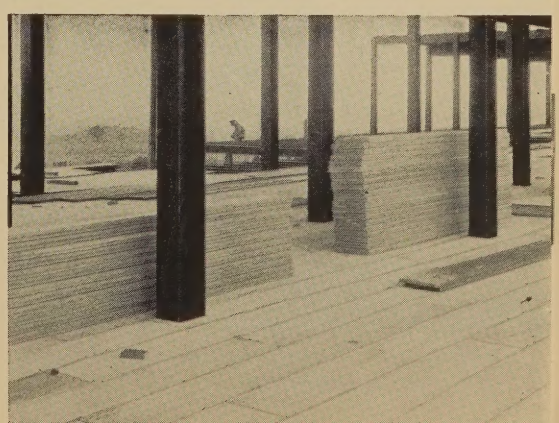
FLOORS, on wood or steel joists or beams spaced not more than 5** feet on centers, for light load buildings, as apartments, hotels, schools, dwellings, etc.

ROOFS, on wood or steel supports spaced not more than 7 feet on centers, for industrial buildings, garages, schools, theatres, frame or other type of dwellings, etc.

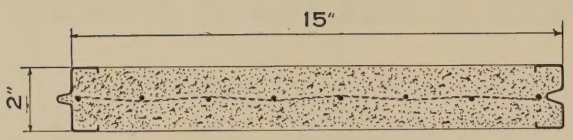
GYPSTEEL PLANK
2" Thick
Weighs Only
12 Pounds
Per Square Foot

*The term Plank as applied to cementitious building products, is a registered trade mark of the American Cyanamid and Chemical Corporation.

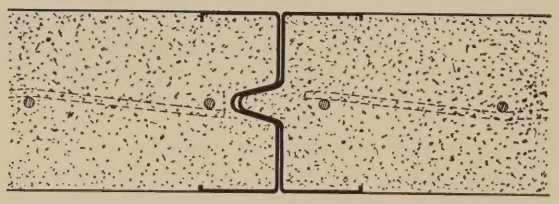
**See detailed description on page 7.



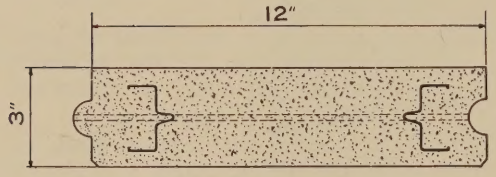
TYPES OF GYPSTEEL PLANK



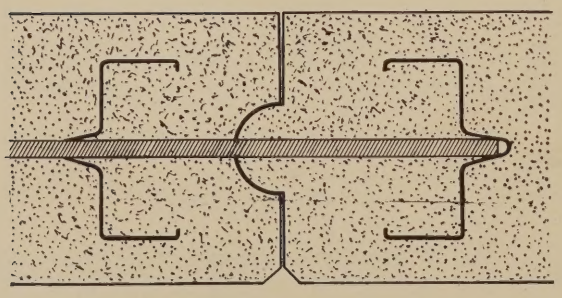
Cross section through Senior and Junior Plank.



Half size section of tongue and groove joint of Senior and Junior Plank, showing how they mesh to form a continuous steel I-beam, 2" deep.



Cross section through Dowelled Plank.



Half size section of tongue and groove joint of Dowelled Plank. Note how the dowel is driven into the recess in the steel reinforcing channel.

Gypsteel Plank is manufactured in two types and three sizes, to meet varying conditions of service, each retaining the same fundamental principle of design; namely, similarity to wood lumber in form, use, convenience, and adaptability, with the certain strength that is assured only by steel reinforcing. Each is a solid slab of factory-cast, extra dense gypsum, made in a standard convenient-to-handle size, adaptable to varying job conditions with a minimum of cutting and waste.

In the first type Plank is reinforced with a binding of copper bearing galvanized steel, tongued and grooved like lumber that meshes to form a steel I-beam. The second is reinforced with steel channels cast within the Plank. It is also tongued and grooved, but of gypsum, and the units are locked together by means of ingenious steel dowels.

SENIOR PLANK — 2″ THICK — 15″ WIDE — 10′ LONG — FOR ROOFS ON SPANS UP TO 7′ AND FOR FLOORS ON SPANS UP TO 5′*. The tongued and grooved steel binding, which encloses the ends as well as the sides, is a single piece frame, locked and reinforced at the corners. The gypsum core is additionally reinforced against impact with galvanized welded wire mesh.

JUNIOR PLANK — 2″ THICK — 15″ WIDE 6′ LONG — FOR ROOFS ON SPANS UP TO 4′ AND FOR FLOORS ON SPANS UP TO 3′. Both the sides and ends have the same type of binding as used on Senior Plank, but of a lighter gage. Like the Senior Plank, it is also reinforced with mesh.

DOWELLED PLANK—3″ THICK—12″ WIDE 10′ LONG—FOR ROOFS ON SPANS UP TO 7′. Reinforced longitudinally with two steel channels embedded in the slabs. Sides and ends are tongued and grooved gypsum. Running crosswise, and cast within the body of the Plank, are five steel dowels

*See detailed description on page 7.

HOW GYPSTEEL PLANK IS USED

The unusual strength which is found in Senior and Junior Plank is derived from the distinctive steel binding. As the units are erected, the edges mesh together, where they form a 2″ I-beam, that spans the distances between, and passes over the supporting steel joists or purlins. This steel "beam" is uniformly supported laterally by the gypsum core, giving it added stiffness and strength.

Note especially that the "tongues" and "grooves" are tapered so that they mesh as easily as wood decking, and yet firmly, to form a solid floor or roof deck. The design of this binding, which is an exclusive feature of Gypsteel, is such that a load applied to an individual Plank will be distributed over the adjacent Plank, through the value in "shear" of the steel tongues. The detailed section shown on page six shows how the binding is turned down into the gypsum to become an integral part of the slab, stiffening the flanges and protecting the edges of the steel against corrosion. Note, also, the smooth surfaces on both top and bottom presented by Gypsteel Plank. There are no corrugations in the steel that may cut a waterproof roof covering. This steel binding extends across the ends, as well as along the sides. At each corner it is locked and reinforced by steel plates, forming a one-piece frame that cannot be distorted. Both Junior and Senior Plank are additionally reinforced with galvanized wire mesh.

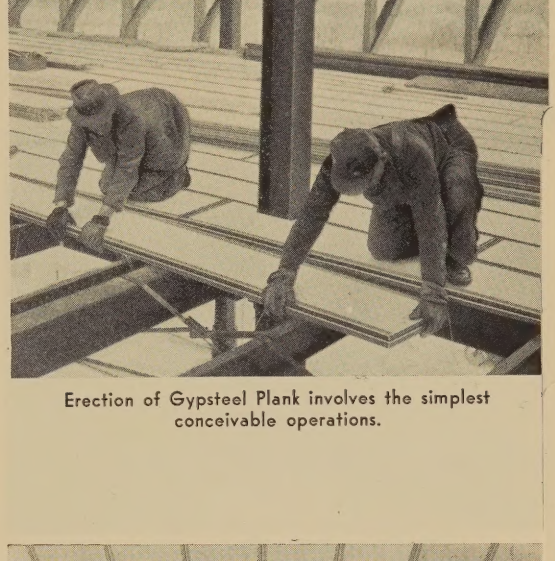
Dowelled Plank likewise has the advantage of distributing loads over a wide area by means of interlocking joints, but employs a different principle in its accomplishment. The sides and ends are of tongued and grooved gypsum, making it easy to fit the units together with tight joints, requiring no mortar, and bringing the top and bottom surfaces into true alignment.

These joints are "locked," and the likelihood of the gypsum "tongues" or "grooves" shearing off is eliminated, by steel dowels cast within each Plank, and driven through and into the next unit as it is erected. These dowels are placed in the Plank when it is manufactured and pass through the two steel channel reinforcing members. Observe in the half size section on page six, how the dowels, driven into the adjacent Plank, enter the recess formed in the steel channels.

In Dowelled Plank there is no exposed steel reinforcing.

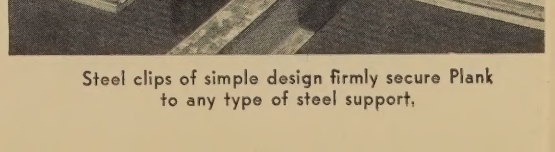
Thus in each type of Plank, the principle employed, whether the tongued and grooved steel binding, or the dowelled joint, serves to lock all units together and to evenly distribute loads that may be concentrated on one or more units. By this distinctive feature it is therefore possible to construct a floor or roof deck with joints coming at random; thus *bringing the economy, and making practical the mass production of factory made units of standard dimensions, and eliminating the cutting, fitting and waste* otherwise necessary to suit various spans or other job conditions.

FOR FLOORS, Senior or Junior Plank is laid directly over either wood or steel floor joists of any type and of *either* uniform or variable spacing. It is suitable for spans between joists up to 5′, its ultimate strength providing a large safety factor over any normal requirements for light load buildings. Where a thin finish flooring, such

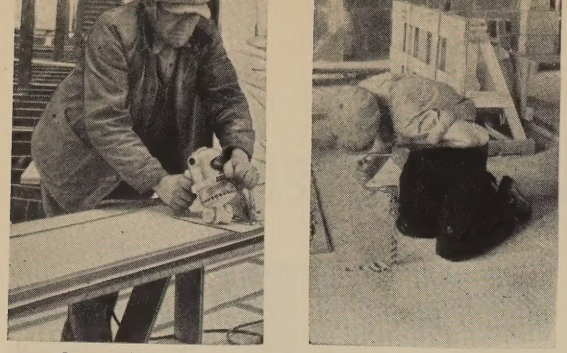


Erection of Gypsteel Plank involves the simplest conceivable operations.

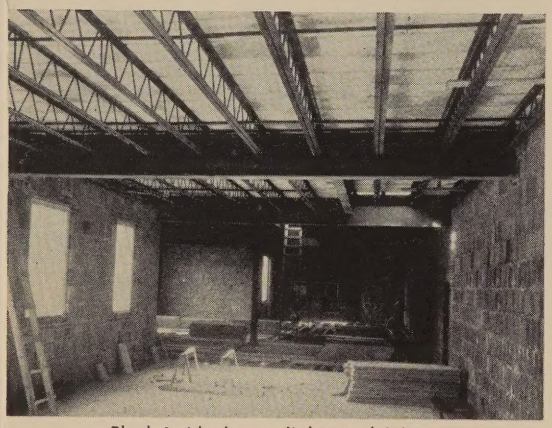
Note how joints are broken at random.



Steel clips of simple design firmly secure Plank to any type of steel support.

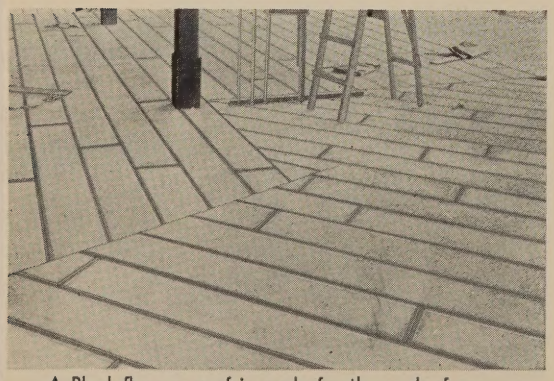


Gypsteel Plank is cut, sawed, or bored as readily as wood lumber.



Plank is ideal over light steel joists.

The Lobby—Hotel Hershey, Hershey, Pa. Any type of finish flooring may be used over Plank.



A Plank floor or roof is ready for the work of succeeding trades as soon as it is laid. No joints to grout. No delays for the slab to "set." No forms to remove.

as linoleum or composition tile, is to be applied over Plank, without an intermediate fill of substantial thickness, we recommend that spans be limited to 4′, in order to maintain a ratio between the overall thickness of the floors and the spans that will assure adequate stiffness.

The Plank is erected with the end joints coming at random and without regard to joist spacings. It is simply necessary to see that a reasonable distance is kept between the end joints in any adjacent row. This important feature reduces cutting to a minimum and eliminates practically all waste, for a small piece left over from the last Plank in any line may be used to start the next one. The tongued and grooved joint assures every Plank being supported by a continuous steel I-beam on the sides, and meshing with abutting Plank, forms an integral unit of the whole area, practically monolithic in effect.

The steel I-beam being symmetrical, Gypsteel Plank may be erected with either side up. There is, however, a difference in the finish on the two surfaces, which may be designated as, "trowelled side" and "mat side" (the smoother). If the ceiling of a floor is to be exposed, it is recommended that the Plank be erected with the mat side down. If the ceiling is covered or if it is proposed to apply a thin type flooring, such as linoleum, mastic, etc., we recommend the mat side up.

A generous supply of steel clips is furnished without additional charge with all Senior or Junior Plank. These are used to fasten the Plank to steel joists or beams. Of simple design, they are easily attached by nails (we recommend 4-d slater's or plasterboard nails) driven directly through the steel binding of the Plank on the female side, and will firmly hold the Plank in place, as well as stiffen the floor supports laterally.

When Plank is used for floors over light steel joists it is usually possible to eliminate the expensive bridging required with other systems, by merely substituting light wire bridging to hold the joists temporarily in line, until the floor is laid. If the Plank clips are attached alternately to the opposite flanges of the supporting members, the Plank itself provides a series of stiff struts, spaced at intervals of 15″, along the length of the supporting members.

The Plank clips are easily adjusted to securely grip the flanges of the supporting steel, but it is important that this be properly done in accordance with the detailed instructions accompanying the first shipment of every order; not only to brace the supporting members, but more especially to eliminate the possibility of movement or squeaks in the Plank sub-floor. *Clips should be used at every intersection* of the Plank with the joists, and *two nails* should be used in *every clip.* Before applying fill or finish the contractor should carefully check the floors for loose Plank. Should any be found, the condition is easily corrected by inserting a steel wedge between the underside of the Plank, at the side binding, and the top flange of the joist. *If the clips are properly installed the floor will be rigid and free from movement.*

Plank is readily cut with an ordinary hacksaw. Or, after cutting the binding, Plank may be broken off if both sides are scored with a saw or a broad blade chisel. On larger operations when more cutting is required, Plank may be economically cut by using a tile cutting saw of either the pistol grip or table type. The names of several manufacturers who specialize in these will be furnished upon request.

Practically any type of standard finish flooring may be applied direct to the Plank. Ordinary double floors are laid by simply nailing the rough flooring direct to the Gypsteel Plank and then laying the finished flooring in the usual manner.

An excellent and economical method is to use 1x4's, spaced about 12″ on centers, nailed direct to the Plank, with the finished flooring nailed to them. In any event, we recommend allowing some clearance between the rows of rough flooring as a guard against warping and buckling. As an added precaution, a layer of waterproof paper is sometimes first laid over the Plank. In laying the rough flooring use 8-d wire nails, driven diagonally in the gypsum, or 6-d nails driven through the Plank binding. Ordinary sleepers may also be nailed direct to the Plank, with fill in between, if desired.

Linoleum, mastic tile and similar flooring, may be laid over a ¼″ minimum coat of Plankote* troweled over the Plank surface by the linoleum or tile contractor. Plankote is manufactured by American Cyanamid & Chemical Corporation. This composition bonds perfectly with Gypsteel, sets quickly and firmly, and is easily trowelled to a smooth, hard finish.

For terrazzo, cement, or similar poured finishes, the Plank should be first water-proofed with a coat of tar or asphalt or the surface primed with a gypsum sealer. The finish should not be less than 1½″ thick (for best results a minimum of 2″ is recommended) and should be provided with adequate expansion joints and mesh reinforcing as recommended by the Portland Cement Association and similar trade bodies. Where a fill is used between the Plank and the finish, it should be not less than 1½″, followed by the same specification for the finish itself as would be used over concrete.

For Roofs. Senior or Junior Plank is used for roofs in a manner similar to its application for floors, and with the same structural advantages. *End joints are staggered and need not come over the supports.* Clips, furnished with the metal bound Plank, are used to fasten it at every intersection of the Plank with the roof purlins.

On the spans recommended of 7′ for Senior size, and 4′ for Junior, Gypsteel Plank shows practically no deflection when loaded to twice its designed capacity of 40 pounds per square foot, and has an ultimate capacity of many times that amount. Even when a test panel of Gypsteel Plank is loaded until the steel binding is permanently deformed, the Plank does not fail or collapse in the ordinary sense, but goes into suspension. The deck will still retain a large proportion of its original strength, for the reason that the individual units are continuous over two or more supports and are securely meshed to adjacent intact units.

Dowelled Plank gives the advantage of an all gypsum roof deck, with substantially added insulation value, that is laid just like the companion metal bound form. Here, also, *end joints are staggered without regard to location of supports.* As the units are erected, the five steel dowels contained in each, are driven through and into the preceding row of Plank, entering a continuous recess in the near reinforcing channels. These dowels not only bond together the abutting units, but also take up the shear in the joints and distribute the load. A suitable punch for driving the dowels in the proper distance is

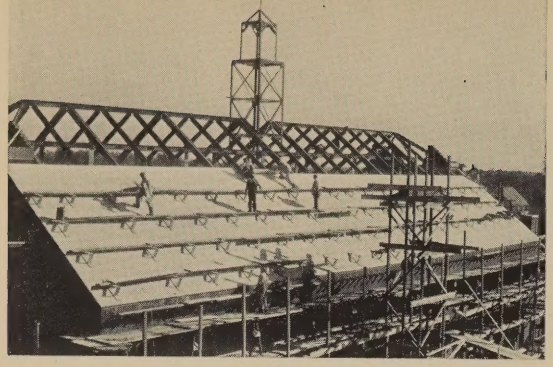
*Trade mark registered U. S. Patent Office.

First floor installation of Plank in a typical small house.

Gypsteel metal bound Plank may be driven up just like lumber.

A Plank Roof is pleasing in appearance and high in insulating value.

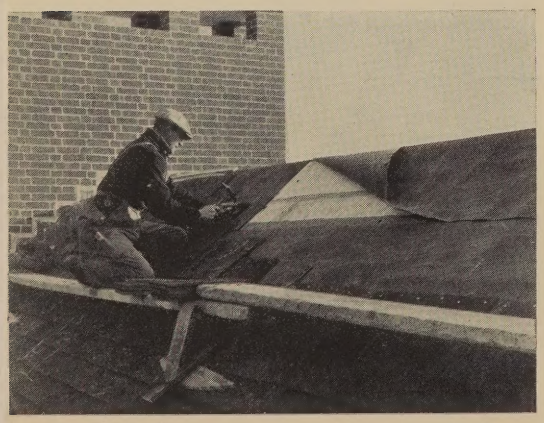
Cut up roofs, steep pitches—bring out the advantages of Gypsteel Plank.



Gypsteel Plank is handled and used like ordinary lumber.

A Dowelled Plank Roof. One of several for the Department of Institutions and Agencies, State of New Jersey.

Driving in the dowels. It is this important feature of Dowelled Plank that gives it strength and safety.



Slate and tile roofings are nailed direct to Plank. No special treatment required.

furnished with all orders of Dowelled Plank. Two weights of reinforcing, for varying spans, are available. Type A is used on spans up to 5′ and Type B up to 7′.

For roofs of flat pitch, up to 1″ per foot, it is not necessary to clip the Dowelled Plank to the purlins. Where fasteners are required, a clip designed to fit the flanges of all standard beams or channels, usually employed in roof construction, is available. It is stamped from ⅛″ thick steel plates. It is applied by simply cutting off the gypsum tongue at each purlin to leave a flat face to which it is fastened by 6-d nails, while it engages the top purlin flange. For roofs having a slope of over 1″ and up to 4″ in twelve, we recommend that clips be used at 3′ intervals along each purlin. For a greater slope they should be used on 12″ centers.

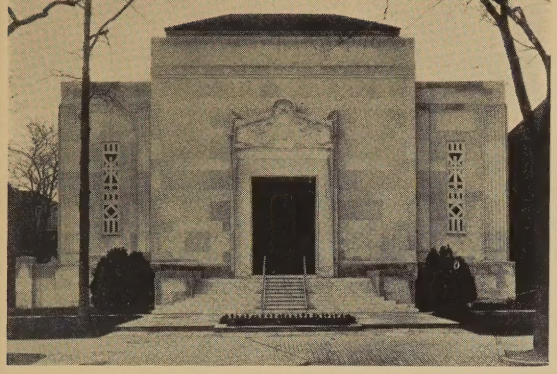
On all decks of steep pitch and with either type of Plank, additional provision should be made to take up the roof thrust. Such may be by means of stop angles, bolting Planks to purlins, etc.

At the eaves of the building, the Plank may overhang up to 18″ beyond supports. At the sides, it is not desirable to extend more than 6″ beyond the supports. All openings, except for small pipes, vents or downspouts should be framed out.

Plank may be erected on any type of roof; flat, pitched, saw tooth, hipped, mansard, etc. It may be placed either with or across the slope. Valleys, gussets and coves are readily formed from Gypsteel composition, poured and screeded to the desired level. As in the case of finished flooring, practically any type of standard roofing is easily applied over Gypsteel Plank. In applying built-up roofings the general practice is to follow the usual specifications for application over wood decks, nailing the first layer of paper or felt, and spot mopping, if desired, but not mopping the entire area. Shingle, slate, and other roofings of this type may be nailed direct to the Plank, which should be dry before application. Square cut nails, preferably of hard copper, and penetrating 1½″ are recommended.

Authentic tests have proven, that when so applied, an average pull of about 150 lbs. is required to withdraw the nails from dry Plank. Where the nail holes in slate or tile come over the steel binding in Junior or Senior Plank, the latter may be quickly pierced with a punch; or, with his hammer, the roofer easily makes a new hole in the slate, or notches the side of the tile so that the nail will come within the body of the Plank. For heavy roofings and steep pitches, it is recommended that the roofing be nailed to wood grounds attached direct to the Plank. Curbs, heads, and end walls of monitors are quickly constructed from the same material, or may be built of Gypsteel Partition Tile 2″ thick, solid, or 3″ or 4″ thick, solid or hollow.

▼



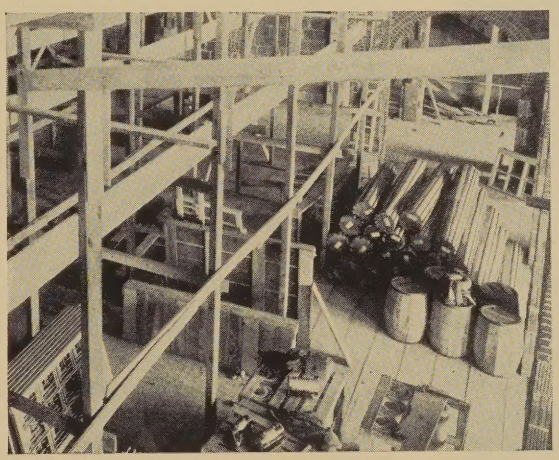
Lutheran Church of Reformation, Washington, D. C.
Gypsteel Plank roof.

Porter & Lockie, Architects.
Davis, Wick & Rosengarten, Builders.

ADVANTAGES OF GYPSTEEL PLANK

Strength and Safety. The strength of a Gypsteel Senior or Junior Plank roof or floor is in the meshed steel binding. This binding forms a strong I-beam stiffened laterally by the gypsum core. The gypsum itself spans only about 13" and is reinforced with galvanized welded wire mesh. By breaking the joints in floor and roof construction, the steel I-beam is continuous over several supports. Through the meshed steel binding two-way distribution is assured and any concentrated load is distributed over a wide area.

Hundreds of thousands of feet of Gypsteel Plank have been installed in floor and roof constructions under every type of service. And even when subjected to abuse for which it is not designed, it has a distinguished record for service. The claims for the strength of steel bound Plank are fully substantiated by load tests which have been made for various cities by the Civil Engineering Testing Laboratories of Columbia University and the Pittsburgh Testing Laboratories, as well as tests which have been made by the U. S. Bureau of Standards for the Government. In tests made on the end spans, with the load uniformly distributed, Senior Plank carried 345 lbs. per square foot with the supports spacer 7′ on centers, and 510 lbs. per square foot when spaced 5′ apart. Similarly, on 4′ spans Junior Plank carried 386 lbs. per square foot, and 1,000 lbs. on 3′. Facsimile copies of the reports of tests prepared by Columbia University and Pittsburgh Testing Laboratories will be sent upon request.



Any floor must sustain greater loads during construction than ever after. Gypsteel Plank is built with "extra" strength to withstand job abuse.

Dowelled Plank affords an equally generous factor of safety for all normal roof requirements. In this type the reinforcement which is embedded within the Plank consists of two steel channels, 2" in depth, running its full length. The five steel dowels which pass through these channels positively bond together the individual Plank and effectively distribute the loads over a wide area. Dowelled Plank, erected on 7′ spans, has been loaded to 300 lbs. per square foot, without failure, and with practically no permanent deflection after the load was removed.

At Warm Springs Foundation, Warm Springs, Ga., founded by Franklin D. Roosevelt

Gypsteel Junior Plank was selected for the floors in new dormitories, Builders and Kress Halls.

Henry J. Tombs, Architect
Lockwood-Greene Engineers, Associate Architect
Hegeman-Harris Company, Inc., Builders

In selecting a permanent floor for the thirty story Girard Trust Building in Philadelphia, Pennsylvania, McKim, Mead and White, architects, chose Short Span Precast Gypsum Floor, as manufactured by this company.

This nationally known hotel selected Plank for the roof and walls of a new pent house.

On this job the contractor wrote, "Our erection cost was no more than a wood roof would have been."

U. S. Dept. of Interior Building, Washington, D. C. When the new seventh story addition was built, more than 50,000 sq. ft. of Plank was used for the roof.

Permanence. Gypsum floors and roofs have been in wide use for nearly two score years. They are found in every type of building, including metropolitan skyscrapers, monumental buildings, hotels, schools, apartments, churches, theatres, industrial buildings of every type, commercial buildings—in fact, it is difficult to name any class of building in which gypsum has not been used for structural purposes. And the record is an enviable one. For many years this organization has specialized in design and manufacture of pre-cast gypsum products for structural purposes and has millions of feet in successful use. Gypsteel Plank is one of the latest developments based on this long experience.

The type of metal used for binding Senior and Junior Plank was adopted, after exhaustive research, as offering the best service of any commercially produced material of this type, suitable for the purpose. The steel sheet is copper bearing, generally recognized as substantially increasing the resistance of steel to corrosion. The sheet is doubly protected with a heavy, tight coat of galvanizing on both sides. The shape of the binding is so designed as to assure the maximum protection against corrosion to the cut edges. Extreme care has also been taken in the design of the rolls which shape the sheet to minimize damage to the protective galvanized coating.

When Junior or Senior Plank is used for floors over unexcavated areas, with the undersides exposed, the steel binding should be painted, as erected, and the underside should be thoroughly protected with a heavy coat of asphalt paint.

Under certain conditions of service the desirability of eliminating all exposed metal that, however well protected, would be liable to corrode, is recognized. Such requirements are usually found in those manufacturing buildings in which wet processes or others tending to cause condensation are in use, or where corrosive fumes are present. For nearly twenty years Gypsteel 3″ Long Span Roofs have been widely used for roof installations of this type, because they offered a solid all gypsum deck that minimized condensation and that was little affected by these adverse conditions.

In Dowelled Plank we have retained these proven advantages of the Gypsteel all gypsum slabs and incorporated with them the Plank features that make possible mass production, simplicity in application, and the greatest economy. Any Dowelled Plank installation over wet manufacturing processes should be kept protected by a good quality paint recommended by a responsible paint manufacturer for that purpose. Gypsteel Roofs, so treated, have given years of service under the worst conditions, with no other maintenance and without signs of deterioration.

The gypsum composition in Plank will not warp, shrink or rot. It is vermin-proof.

Insulation. The composition used in Gypsteel Plank offers the highest

insulation against the transmission of heat of any structural material. This corporation was one of the pioneers in educating owners of heated buildings on the very real economies that may be effected through the intelligent use of insulation in roof construction. We must not lose sight of the fact, however, that there are many parts of the building below the roof through which heat losses occur, and that while theoretical savings may be made with additional roof insulation, there is a point beyond which these are actually negligible.

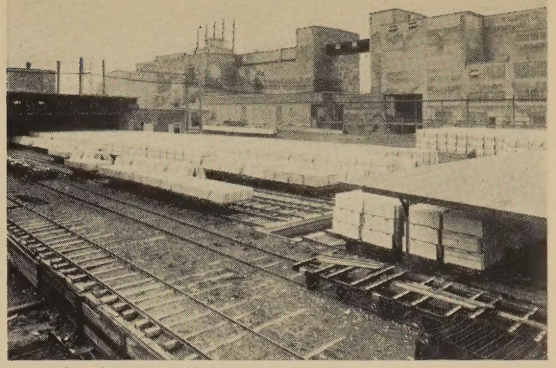
Many conflicting claims are made on the subject of heat insulation. The cautious buyer will do well to seek the verdict of unbiased authority. Probably the most carefully compiled data on this subject is to be found in the yearly Guide of the American Society of Heating and Ventilating Engineers. A reference to this Guide will show that 2″ of gypsum composition such as used in Gypsteel Plank is the equivalent, in insulating value, of approximately nine or ten inches of concrete, or of an eight-inch brick wall. In most cases the degree of insulation offered by Junior or Senior Plank is ample to guard against excessive heat loss. Where further insulation may be desired it is thoroughly practical to supply such additional insulation by the application, directly over Plank, of material developed primarily for its insulating value, or, if the underside of the roof is not exposed to view, very efficient results are obtained by laying bright metal foil over the purlins so that it will be suspended below the roof deck with an air space between.

If the problem is not simply one of reducing heat loss, but is a matter of eliminating possible excess condensation, such as in an extremely cold climate, or under conditions of high humidity or high temperature combined with humidity, Dowelled Plank is recommended. Dowelled Plank gives three full inches of gypsum insulation over all supporting steel. The elimination of the steel binding and the lack of necessity for sub-purlins or other special supports extending into the slab, as are frequently required with other types of precast roof construction, remove the most frequent causes of condensation under these extreme service conditions.

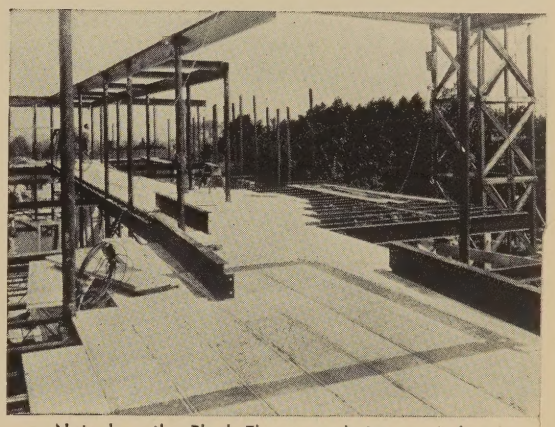
Exposure to the Elements. Neither rain nor snow—not even freezing—disintegrates or affects the strength of Plank floors and roofs. The gypsum used in Plank is a laboratory controlled product of extra hardness and density, made to withstand job conditions. The 2″ steel ribs, 15″ on centers in the Junior and Senior Plank, aid the wearing qualities during construction. Of course, Plank is not a wearing surface, and runways should be laid for wheeling, especially when the floor or roof is wet. Before nailing flooring or roofing, the Plank should be dry.

Fire Resistance. Gypsteel Gypsum as used in Plank is absolutely incombustible. Two inches of gypsum is universally recognized as the highest type of fireproofing and is approved in practically all cities as fire protection for beams and girders in even the tallest structures.

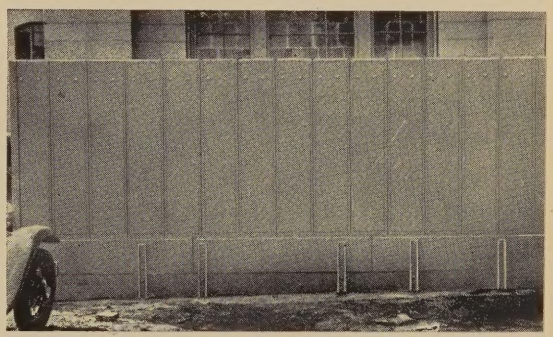
Simplicity. The erection of Gypsteel Plank is a simple hammer and



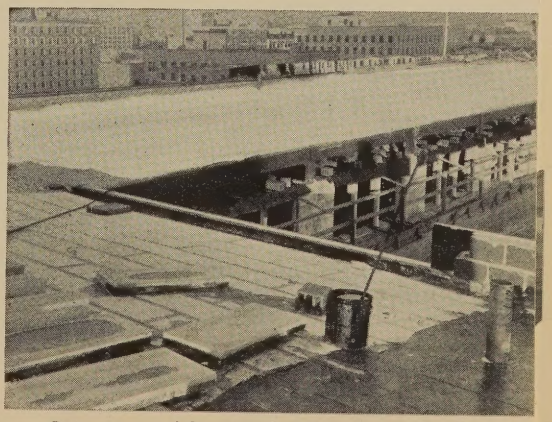
What better evidence of weather resisting qualities can be offered than the plant where Gypsteel Plank is made? All walls are built of untreated 3" hollow Gypsteel Tile of the same composition as Plank.



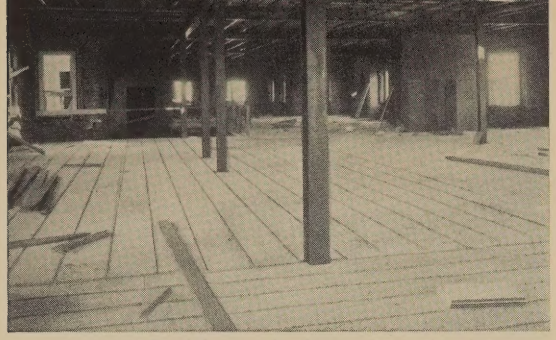
Note how the Plank Floors are being carried up ahead of the walls. No worry about exposure here.



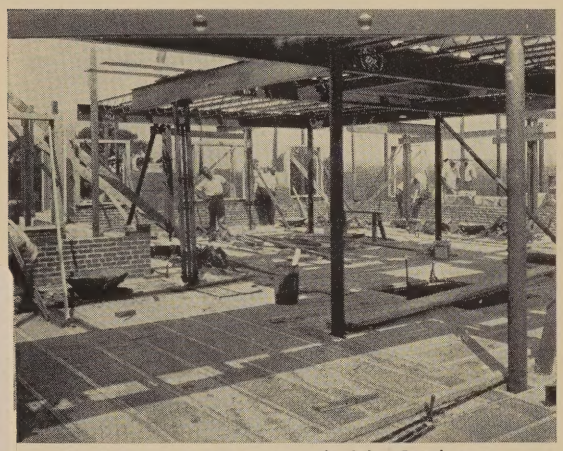
The wide acceptance of Plank by the building industry is emphasized by the many novel uses our customers have found for it. Here it fences a transformer station. Others have used Plank to build doors, cat walks, stairs, etc.



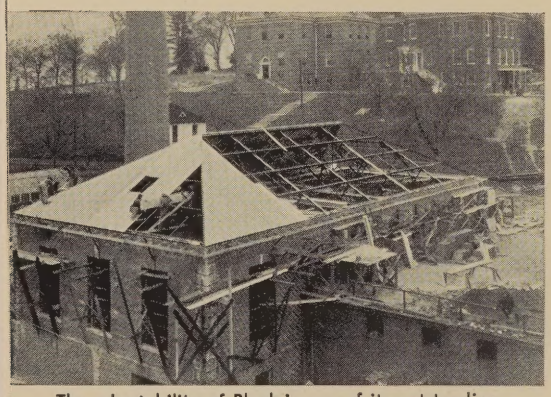
Rain, snow and freezing do not permanently affect the strength of Plank.



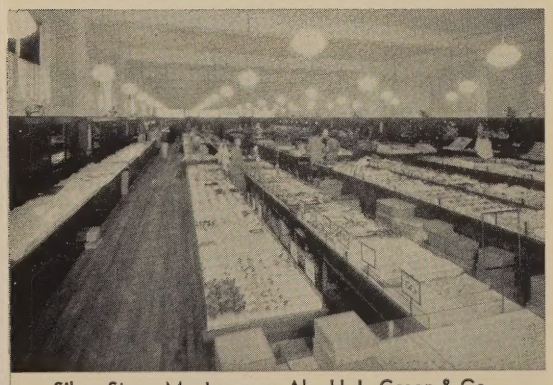
Gypsteel Plank has made this residence fire-safe, more comfortable in winter, and quiet. To hundreds of owners it is giving the advantages of luxury construction at moderate cost.



Plank fits any construction schedule. Quick to install for it is easy to handle and requires only carpenter's tools.



The adaptability of Plank is one of its outstanding features.



Silver Store, Montgomery, Ala. H. L. Green & Co., Architects. Algernon Blair, Builder. H. L. Green Co. has selected Plank floors and roofs for several stores because of its basic economy and resistance to termites.

saw job. There is nothing about it to make it hard to use and handle. It may be cut, sawed or bored as readily as wood.

Speed of Erection. The simplicity of Gypsteel Plank makes it quick to erect. With large units of reasonable weight the areas grow fast. With broken joints there is little cutting, and practically no waste. There is no form work—no water to dry out—nothing to "set." No matter how you are using it, it is ready for the work of the succeeding trades as soon as it is placed.

Termites. The importance of termites, or "white ants" is in the damage they frequently cause to buildings. They commonly enter a structure either through portions of the wood frame bearing on the ground, or by means of small tunnels over the surface of brick or stone. They prefer to live in darkness and feed upon the core of the object they attack, so that their presence is frequently not made known until most serious inroads have been made upon the structural members. Once established, they are difficult and expensive to control.

They have been found chiefly, in this country, in the southern states, but in recent years reports of their presence in the North, particularly along the seaboard, have grown in frequency. Circumstances, such as recently reported of the destruction of a house and barn near Brussells, Illinois, by these insects, are not unusual.

Gypsteel Gypsum actually contains an ingredient which is a known inhibitive to termites, and which is not present in other gypsum. Gypsteel gypsum blocks, identical with the composition used in all forms of Plank, have undergone a comprehensive series of tests at the University of California, under the direction of Professor Charles A. Krofold, Chairman, Biological Subcommittee of the Termite Investigation's Committee. As a result, it was conclusively proven that none of these destructive insects can live in Gypsteel Gypsum Composition.

Light Weight. Gypsteel Junior and Senior Plank weigh only 12 pounds per square foot, Dowelled Plank, 16 pounds per square foot. In using Gypsteel Plank for floors or roofs substantial savings can usually be made in the tonnage of steel required for the frame, as compared with other materials of comparable quality. Its lightness permits its use over frames designed for almost any other type of construction. Naturally, this also contributes to ease of handling.

Adaptability. Gypsteel Plank is adaptable to almost any floor or roof installation in most fire resistive buildings. It is frequently used for many other urposes, such as partitions, ceilings and sheathing. It is an economical material to carry in stock ready for that emergency building or alteration.

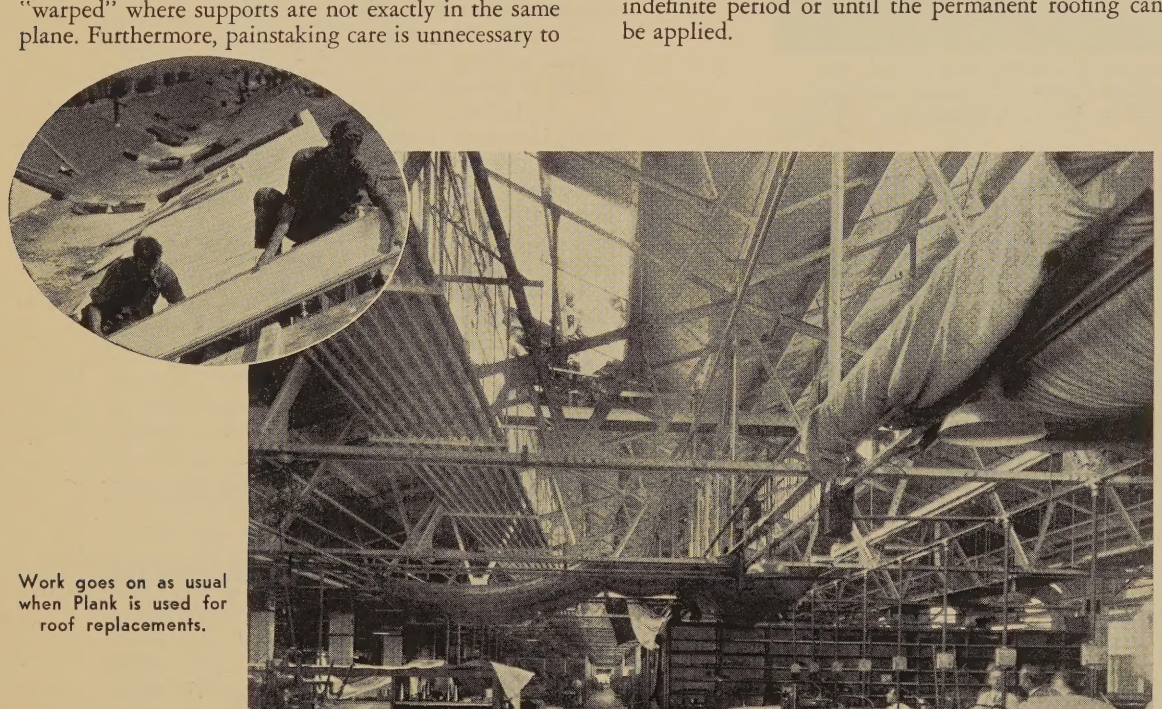
Economy. All of these qualities combine to make Gypsteel Plank the *economical* material. With lightness of weight and strength to take long spans, it permits steel savings. With its fire resistant properties, insurance rate are frequently brought lower. Its insulating qualities result in fuel savings. Because of its durability, its maintenance costs are a minimum. Because it is simple and quick to erect, the time and labor required are reduced to the lowest possible factor.

GYPSTEEL PLANK
For Roof Replacements

Gypsteel Plank is unusually well adapted for roof replacements, particularly when it is imperative that the buildings shall not be left open because of possible interference with plant operations or damage to costly machinery and materials in process of manufacture. Gypsteel Plank is so light—12 pounds per square foot—that it may be applied over the same frame that would support practically any other type of roof. Senior Plank is suitable for spans up to seven feet, while Junior Plank may be used where they are four feet or less. It is not necessary that the purlins be uniformly spaced nor that they be parallel. Contrary to the requirements for most factory-fabricated constructions, the width of bearing is unimportant. It is not even necessary to take any preliminary measurements beyond assuring that the maximum permissible spacing is not exceeded. As joints are broken to come at random, you have a freedom from "set" requirements not possible with any other type of roof. Plank is readily cut around openings or unexpected obstructions and may even be "warped" where supports are not exactly in the same plane. Furthermore, painstaking care is unnecessary to obtain a tight fit around ventilators, windows, hips, and valleys, etc. Plastic gypsum, which bonds perfectly to Plank, can be used to patch up rough edges quickly, fill open joints at the Plank ends, rounded corners, etc. In short, here is a material that meets job conditions as it finds them, eliminates costly changes in the frame that are frequently necessary when applying new roofs, and permits a speed that assures keeping your building water-tight throughout the entire replacement operation.

Gypsteel Plank is so easy to erect. As soon as you have removed a strip of the old roof two feet or more wide, you may begin to apply the new deck. The tongued and grooved joints mesh easily. The fastening clips are quickly attached and you immediately have a working platform.

Either a temporary layer of waterproof paper or the first layer of felt of a built-up roofing may be quickly tacked down over the Plank roof, when the day's area is completed, making the roof weather-tight for an indefinite period or until the permanent roofing can be applied.



Work goes on as usual when Plank is used for roof replacements.

Mary Harkness Dormitory, Connecticut College for Women, New London, Connecticut, Shreve, Lamb, and Harmon, Architects. Gypsteel Plank used throughout for floors.

Children's Hospital, Marshallton, Del. William Reynolds Manning and A. Burton Stanhope, Architects. Plank floors and roofs throughout.

A modern residence using Gypsteel Plank. Holden. McLaughlin Associates, Architects.

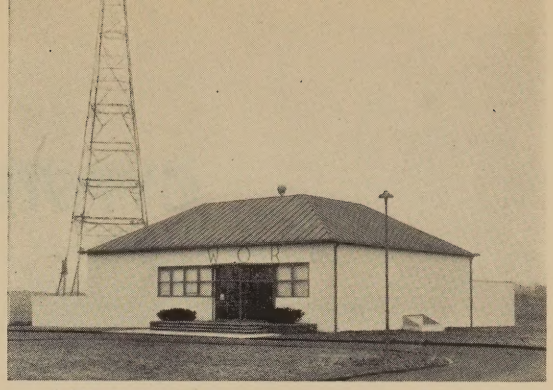
Store No. 100. Neisner Bros., Inc., Cincinnati, Ohio. Plank floors and roofs throughout.

A reference list of Architects and Engineers who have used Gypsteel Plank.

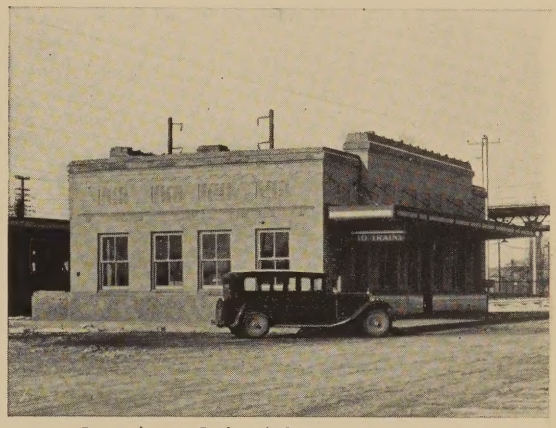
Allen, Collens & Willis, Boston, Mass.
Bagg & Newkirk, Utica, N. Y.
Dwight James Baum, New York, N. Y.
Bley & Lyman, Buffalo, N. Y.
C. V. R. Bogert, Hackensack, N. J.
Brown & Whiteside, Wilmington, Del.
Burtis Brown, Boston, Mass.
J. B. Chamberlin, Hazelton, Pa.
Warren W. Chapin, New York, N. Y.
Cleverdon, Varney & Pike, Boston, Mass.
Conrad & Cummings, Binghamton, N. Y.
A. Graham Creighton, New London, Conn.
Davis & Lewis, Scranton, Pa.
Desmond & Lord, Boston, Mass.
R. W. Foote, New Haven, Conn.
Robert R. Graham, Middletown, N. Y.
Hacker & Hacker, Fort Lee, N. J.
Hallenbeck & Sargent, Syracuse, N. Y.
Harback & Kideney, Buffalo, N. Y.
Heacock & Hokanson, Philadelphia, Pa.
Arthur B. Heaton, Washington, D. C.
Hinnant & Smith, Lynchburg, Va.
Holden, McLaughlin & Associates, New York, N. Y.
Lawrence J. Hopp, Pittsburgh, Pa.
Howe & Church, Providence, R. I.
Kaley & Dwyer, Binghamton, N. Y.
Kendall, Taylor & Co., Boston, Mass.
D. D. Kieff, Watertown, N. Y.
Melvin L. King, Syracuse, N. Y.
Kubitz & Koenig, Baltimore, Md.
Wm. E. Lehman, Newark, N. J.
Mark Linenthal, Boston, Mass.
Lockwood-Greene Engineers, Inc., New York, N. Y
McCormick Co., Inc., Pittsburgh, Pa.
Thos. McKaig, Buffalo, N. Y.
McKim, Mead & White, New York, N. Y.
Metcalf & Eddy, Boston, Mass.
Monks & Johnson, Boston, Mass.
Doughlas Orr, New Haven, Conn.
Payne & Keefe, New London, Conn.
J. Noble Pierson, Perth Amboy, N. J.
Charles G. Poggi, Elizabeth, N. J.
Porter & Lockie, Washington, D. C.
Ellwood D. Powers, Newark, N. J.
Bernard H. Prack, Pittsburgh, Pa.
Purdy & Henderson Co., New York, N. Y.
Randall & Vedder, Syracuse, N. Y.
Maurice Reidy, Boston, Mass.
Robinson, Stanhope & Manning, Wilmington, Del.
Elwyn E. Seelye, Inc., New York, N. Y.
Shreve, Lamb & Harmon, New York, N. Y.
Silverman & Levy, Philadelphia, Pa.
J. E. Sirrine & Co., Greenville, S. C.
Thalheimer & Weitz, Philadelphia, Pa.
Tietig & Lee, Cincinnati, Ohio
United States Government
Voorhees, Gmelin & Walker, New York, N. Y.
Whitman, Requardt & Smith, Baltimore, Md.
Whitney Engineering Co., Boston, Mass.
Williams, Coile & Pipino, Newport News, Va.
Tudor R. Williams, Scranton, Pa.
William Wilson, New York, N. Y.
J. R. Worcester & Co., Boston, Mass.
Wright, Ellis & Wright, Syracuse, N. Y.
Zantzinger & Borie, Philadelphia, Pa.

A reference list of Nationally known Companies who have used Gypsteel Plank.

American Car & Foundry Company
American Gas & Electric Company
American Oil Company
American Smelting & Refining Company
Bell Telephone Company
Bethlehem Steel Corporation
Boston Elevated Railway
Celanese Corporation of America
Cincinnati Milling Machine Company
Climax Molybdenum Company
Collins & Aikman Corporation
Columbia Radiator Company
Corning Glass Works
Crane Company
Delco-Remy Division of General Motors Corp.
Eastern States Milling Company
Edward G. Budd Manufacturing Company
Electric Boat Company
Fiberloid Corporation
General Aniline Works, Inc.
General Electric Company
Glen Alden Coal Company
Goodyear Service, Inc.
H. L. Green Company, Inc.
Gulf Refining Company
Halcomb Steel Company
Harris Structural Steel Corporation
Hershey Chocolate Corporation
Hoffman Beverage Company
H. P. Hood & Sons, Inc.
Hudson Valley Fuel Company
Hygrade-Sylvania Corporation
Imperial Wall Paper Company
Jersey Central Power & Light Co.
Johns-Manville Company
Endicott Johnson Corporation
Kendall Refining Company
Liggett Drug Company
Linde Air Products Company
Liquid Carbonic Corporation
Metals Disintegrating Company
National Clothing Company
National Sugar Refining Co. of New Jersey
Neisner Brothers, Inc.
Pennsylvania Railroad Company
Pittsburgh Plate Glass Company
Pure Oil Company
Quaker State Oil Company
St. Joseph Lead Company
Scott Paper Company
Scovill Manufacturing Company
Scranton Electric Company
Sinclair Refining Company
Singer Sewing Machine Company
Socony-Vacuum Oil Company, Inc.
Standard Oil Company of N. J.
Sun Oil Company
Swift & Company
Synthane Corporation
The Andrew Jergens Company
The Texas Company
Tidewater Oil Company
United Shoe Machinery Company
United States Metals Refining Co.
Western Electric Company



WOR 50,000 watt transmission station, Carteret, N. J. Voorhees, Gmelin and Walker, Architects.



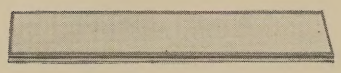
Pennsylvania Railroad Co. passenger station, Norristown, Pa.

Goodyear Rubber Co. Tire and Service Station, Boston, Mass.

Gulf Refining Co. Service Station, Philadelphia, Pa. Plank covers many Gulf stations from Indiana to Florida.

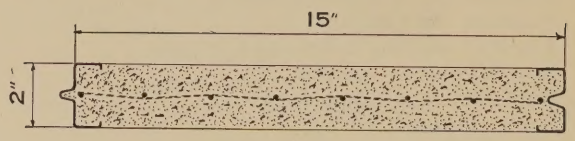
GYPSTEEL JUNIOR PLANK

Junior Plank



2" thick, 15" wide
6'-0" long

Weight, 12 lbs. per sq. ft.



Cross section through Senior and Junior Plank.

The tongued and grooved steel binding, which encloses the ends as well as the sides is a single piece frame locked and reinforced at the corners. The gypsum core is additionally reinforced against impact with galvanized welded wire mesh.

TOTAL SAFE SUPERIMPOSED LOAD IN LBS. PER SQ. FOOT

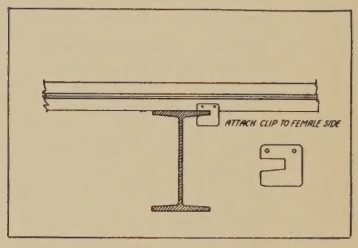
2′-0″	3′-0″	*Roofs Only* 4′-0″
150	120	75

Typical Method of fastening Gypsteel Junior or Senior Plank to supports.

For floors, flat roofs and roofs with a pitch less than 3" in 12", specify Type 20 clips; where Plank is supported by open-web steel joists, specify name of joist manufacturer.

For roofs having a pitch of 3" in 12", or more, specify Type 16 clips.

Attach clips with 4d slaters or plasterboard nails.



SPECIFICATIONS
For Junior Plank Floors or Roofs

All roofs (or floors) shall be constructed of steel bound Gypsteel Junior Plank as manufactured by the American Cyanamid and Chemical Corporation. This Plank shall consist of factory moulded units 2″ thick by 15″ wide by 6′-0″ long, bound and reinforced on the sides and ends by "tongued and grooved" galvanized copper bearing steel channels, 2″ deep. The gypsum core shall be reinforced with steel mesh.

The "groove" channel shall have formed at the center of its web a triangular groove running longitudinally, not less than ½″ deep, the sides of which shall form an angle with each other of not more than 20°. The "tongue" channel shall have formed in its web a wedge-like tongue which will accurately and snugly fit the above described groove.

The Plank shall be laid directly over supporting purlins (or joists or beams) to which they shall be fastened down by steel clips, furnished by the manufacturer, engaging their top flanges*, and securely nailed to the sides of the Plank with four penny galvanized slater's nails. Plank shall be laid with "tongues" meshing into "grooves" of adjoining units. End joints need not come over the supports, but shall be broken with the maximum practicable distance between them.

Note: *See footnote under Dowelled Plank specifications.*

NOTE: *Most manufacturers or trade associations of manufacturers of various types of floor finishes and roofing materials have prepared detailed specifications for the application of their products over Gypsteel Plank. Many of these will be found in Sweet's Architectural Catalogs or may be obtained directly from the manufacturers. We will be glad to supply the approved specifications of the manufacturer of any finished flooring or roofing in which you are interested.*

---

*When used over light steel joists, without bridging, insert the following words: "alternately on opposite sides."

GYPSTEEL SENIOR PLANK

Senior Plank

2" thick, 15" wide
10'-0" long
Weight, 12 lbs. per sq. ft.

TOTAL SAFE SUPERIMPOSED LOAD IN LBS. PER SQ. FOOT

		Roofs Only	
4'-0"	5'-0"	6'-0"	7'-0"
150	*150	75	75

**Where a thin type flooring, such as linoleum or composition tile, is to be applied over Plank, without an intermediate fill of substantial thickness, we recommend not over 4' spans for floors.*

SPECIFICATIONS
For Senior Plank Floors or Roofs

All roofs (or floors) shall be constructed of steel bound Gypsteel Senior Plank as manufactured by the American Cyanamid and Chemical Corporation. This Plank shall consist of factory moulded units 2" thick by 15" wide by 10'-0" long, bound and reinforced on the sides and ends by "tongued and grooved" galvanized copper-bearing steel channels, 2" deep. The gypsum core shall be reinforced with steel mesh.

The "groove" channel shall have formed at the center of its web, a triangular groove running longitudinally, not less than ½" deep, the sides of which shall form an angle with each other of not more than 20°. The "tongue" channel shall have formed in its web a wedge-like tongue which will accurately and snugly fit the above described groove.

The Plank shall be laid directly over supporting purlins (or joists or beams) to which they shall be fastened down by steel clips, furnished by the manufacturer, engaging their top flanges,** and securely nailed to the sides of the Plank with four penny slater's or plasterboard nails. Plank shall be laid with "tongues" meshing into "grooves" of adjoining units. End joints need not come over the supports, but shall be broken with the maximum practicable distance between them.

Note: *See footnotes under Junior and Dowelled Plank specifications.*

**When used over light steel joists, without bridging, insert the following words: "alternately on opposite sides."

Specifications for Application of PLANKOTE Over GYPSTEEL PLANK Floors

Insert under Linoleum or Composition Tile Flooring Specifications

Over all Gypsteel Plank floors, where linoleum (or composition tile) flooring is called for, lay a levelling coat of Plankote, as manufactured by American Cyanamid and Chemical Corporation.

The surface of the Gypsteel Plank Floor shall be swept thoroughly to remove any loose material or debris before beginning to lay Plankote.

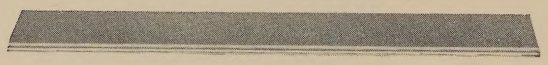
Plankote shall be prepared for use by simply mixing with water to a consistency suitable for troweling. First fill all joints and allow to harden. Then, just prior to application of the first coat, dampen the Gypsteel Plank by sprinkling with water; do not saturate.

Plankote shall be applied to a minimum thickness of ¼"; first laying a rough coat over the entire surface, and, when set hard, doubling back with the finish coat, bringing to the desired grounds and trowelling smooth.

Note: *Plankote is the registered trademark of the American Cyanamid and Chemical Corporation applied to a levelling material of its manufacture designed to provide a dense, smooth base for linoleum and composition tile floorings, etc. It sets hard in from two to three hours. Therefore, do not mix larger batches than will be used in one hour, and do not re-temper Plankote after it has begun to harden. It shall be installed as a finishing operation, and followed as soon as dry with the flooring.*

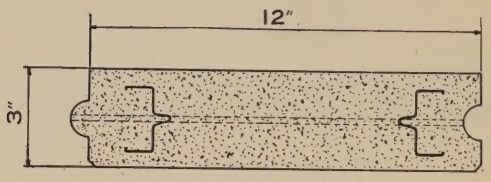
GYPSTEEL DOWELLED PLANK

Dowelled Plank



3" thick, 12" wide
10'-0" long

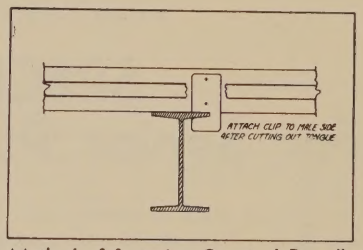
Weight, 16 lbs. per sq. ft.



Cross section through Dowelled Plank.
Reinforced longitudinally with two steel channels embedded in the slabs. Sides and ends are tongued and grooved gypsum. Running crosswise and cast within the body of the plank, are five steel dowels.

TOTAL SAFE SUPERIMPOSED LOAD IN LBS. PER SQ. FOOT

5'-0" Type A	7'-0" Type B
75	75



Typical Method of fastening Gypsteel Dowelled Plank to supports.
For roofs, with a pitch of 1" in 12", or less, per foot, clips are not required.
For a pitch of more than 1", but not more than 4", specify clips 3' centers; for pitch over 4", specify 1' centers.

SPECIFICATIONS
For Dowelled Plank Roofs

All roofs shall be constructed of Gypsteel Dowelled Plank, Type A* (or B), as manufactured by the American Cyanamid and Chemical Corporation. This Plank shall consist of factory moulded units, 3" thick, solid, by 12" wide, by 10'-0" long. The sides and ends shall be moulded with matching tongues and grooves.

Each Plank shall be longitudinally reinforced with two parallel steel channels, 2" deep, embedded in the Plank near its side edges. Each channel shall have a continuous V-shaped recess formed along the center line of its web. Each Plank shall contain five steel dowels, running across its full width, and passing through the center of the channel webs.

The Plank shall be laid directly over supporting purlins with "tongues" meshing into "grooves" of adjoining units. As each row of Plank is installed, the dowels shall be driven through and into the preceding row until they wedge in the recess in the near reinforcing channels.

On roofs having a pitch of more than 1", and not more than 4" per foot, steel clips, available from the manufacturer, shall secure the Plank to the purlins at not more than three foot intervals. On roofs of more than 4" pitch, clips shall be used on one foot centers. Where used, the tongue shall be neatly cut away to provide a flat face for the clip, which shall be securely nailed to the side of the Plank with six penny nails.

End joints of Plank need not come over supports, but shall be broken with the maximum practicable distance (at least three feet) between them. After erection any spalls shall be neatly patched with Gypsteel Patching Plaster.

Note: *On Plank roofs of all types, with more than 1½" pitch per foot, the thrust should be taken up at the eaves by a stop angle or other member of appropriate size and strength. On very steep pitches, the top flanges of every third or fourth row of purlins may be punched to permit the bolting of the Plank direct to the steel at such intervals as the engineer may select.*

*For spans, not exceeding 5'-0", specify "Type A." For spans, not exceeding 7'-0", specify "Type B."

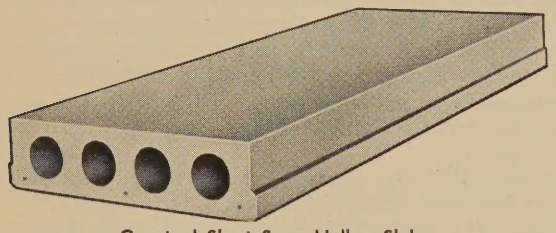
GYPSTEEL PRE-CAST SHORT SPAN ROOF CONSTRUCTION

Gypsteel Pre-Cast Short Span Roof Slabs are reinforced rectangular solid or hollow units of Gypsteel Composition manufactured in standard length of 30" only. The solid slabs are 24" wide, the hollow 12", and come in 2½" or 3" thickness, solid and 3" or 4" thick hollow. All are reinforced with $\frac{5}{16}$" cold drawn steel rods. All sizes are carried in stock for prompt delivery.

Details of Stock Sizes

Thickness	*Width*	*Length*	*Wt. per sq. ft.*
2½"	24"	29¾" Solid	12 lb.
3"	24"	30" Solid	16 lb.
3"	12"	30" Hollow	11 lb.
4"	12"	30" Hollow	14 lb.

The slab in most general use is the 3" solid or hollow. In installation, either of these types (or the 4" hollow) are set upon the bottom flanges of Gypsteel Rolled Steel Sub-Purlins, spaced about 30⅜" back to back. The Gypsteel Sub-Purlins span the distances between and rest upon the main purlins or trusses, to the top flanges of which they are either bolted, clipped or



Gypsteel Short Span Hollow Slab

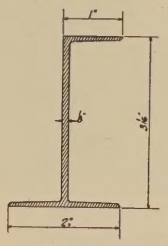
spot-welded. One end of the slab is notched on the top side to fit under the head or top flange of the sub-purlin (the 2½" thick slab cannot be used with the Gypsteel section, as the latter would project above the top surface of the slab).

Light rail, tee, or angle sub-purlins may also be used in a similar manner with all sizes of Gypsteel Short Span Slabs.

The spaces between the sides and ends of the slabs, and over the intervening flanges, stems of tees, etc., are solidly fillled with gypsum grout, which is leveled flush with the top surface of the Slabs.

Elements of Gypsteel Sub-Purlin

Weight per linear foot	2.65 lbs.
Area	.775 sq. in.
Moment of inertia	1.079 in. 4
Section modulus	.603 in. 3



Gypsteel Rolled Steel Sub-Purlin

Total Load-carrying capacity in pounds per square foot Based on 30-inch spacing

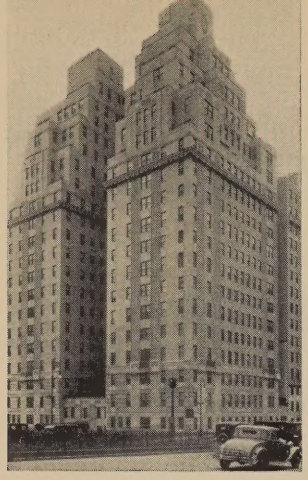
S=18,000 Maximum deflection .268 in.

Load lbs. sq. ft.	Span	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"
	M=WL/8	115	95	80	68	59	51	—	—
	M=WL/10	143	118	99	84	72	63	55	49

SPECIFICATIONS for Gypsteel Pre-Cast Short Span Roofs

All roof decks shall consist of Gypsteel 3" (or 4") Hollow Short Span Pre-Cast Roof Slabs (or solid—2½" or 3" thick), manufactured by the American Cyanamid and Chemical Corporation. These slabs shall be supported by Gypsteel Sub-Purlins (or by tees or light rails designed safely to carry a live load of—pounds per square foot).

Slabs shall span the distance between, and rest directly upon, the horizontal flanges of the sub-purlins. The joints between the sides of the slabs formed by bevelled ribs moulded along the bottom side-edges, and the spaces between the ends of slabs, are to be flushed solid with gypsum grout, and levelled off flush with the top surface.



895 Park Avenue, New York, N. Y. Sloan & Robertson, Architects. Thos. O'Reilly & Son, Inc., Builders, Gypsteel Precast floors and ceilings throughout.

GYPSTEEL PRE-CAST CEILING SLABS

The use of gypsum for the protection of steel members against the effects of fire has long been recognized and accepted at the highest rating by fire underwriters and building codes of the principal cities. The superiority of gypsum lies not merely in its incombustibility, but, more particularly, in its efficiency in protecting the structural steel against injurious temperatures during a fire, and in its freedom, under high temperatures, from the expansion, cracking, spalling, or fusing frequently experienced with other materials in severe fires.

The outstanding superiority of gypsum for this purpose has been shown by its remarkable record in actual fires in gypsum protected buildings, as well as by many tests by recognized laboratories. Several official fire and water tests on 2" gypsum ceilings have been made by Columbia University under the rigid provisions of the Building Code of New York City.

In these tests, the ceilings were subjected to an average temperature of 1700° F. for four hours, immediately followed by a flood of water. The success with which the ceilings performed their protective functions in every case is well illustrated by the record of temperatures of the supporting steel directly above the ceilings. The maximum temperature reached by the steel at any time in any of these tests was 315° F.

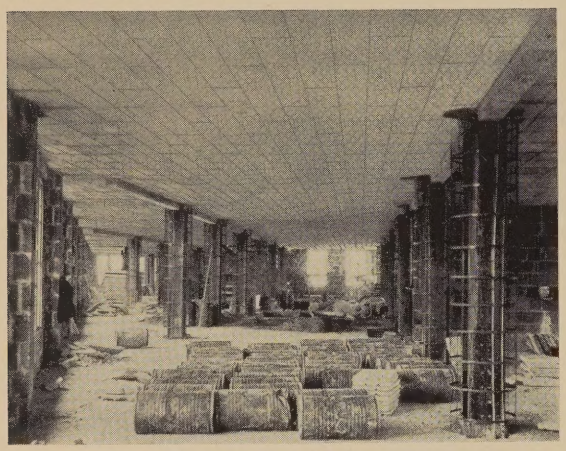
Gypsteel Precast Ceiling Slabs have been used for years to provide flat ceilings of class "A" fireproof construction in steel frame buildings of all types. Used in combination with Senior or Junior Plank, they are suspended beneath the supporting steel, completely fireproofing these members with 2 inches of solid gypsum and making possible a light weight, flat ceiling floor system, with the highest fireproof rating. Gypsteel Precast Ceilings fireproof the supporting floor steel in many well known and high class apartments, hotels, schools, and colleges, hospitals, mercantile buildings, theatres, museums, libraries, municipal buildings, etc.

Suspended beneath the bottom chords of roof trusses they not only fireproof the steel, but effect substantial savings in fuel through their own high insulating value, and by isolating the normally unused space above the bottom chords. Gypsteel ceilings have been widely used in this manner in theatres, auditoriums, garages, hangars, etc.

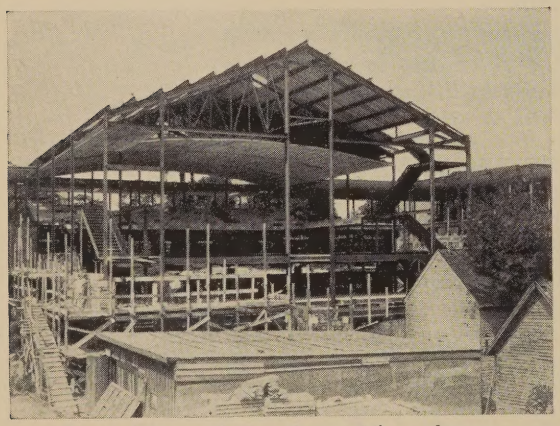
Gypsteel ceilings and floors are particularly well adapted for use in installing mezzanines, balconies, loggias, etc., in existing buildings, or for the addition of floors above the existing structure. This work must often be carried on without interrupting the use of the premises. Absence of forms and dripping water, as well as the rapidity of the installation, insure a minimum of annoyance to occupants, and a maximum of speed in accomplishing the work.

Makes Joist Construction Fireproof. Gypsteel Precast Ceilings are recognized as Class A fireproofing, and, therefore, permit the use of open web steel joists in buildings beyond the present height limitations for these members with metal lath ceilings below. The architect or engineer who wants to use steel floor joists for their economy and convenience, but at the same time achieve high fireproof construction, will use Gypsteel Ceiling Slabs. This is *the* practical method; simple to erect and moderate in cost.

Detailed information on Gypsteel Precast Ceilings will be supplied upon request.



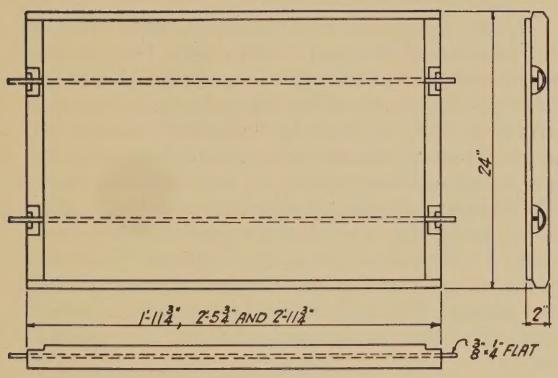
Gypsteel Ceilings afford full fire protection to floors and roof beams and provide an excellent plaster base.



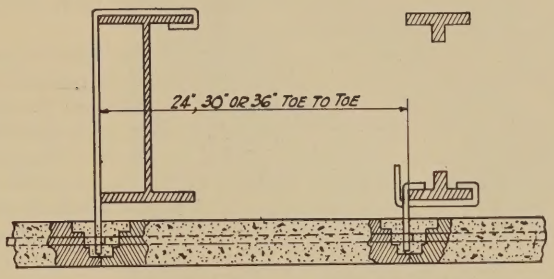
Gypsteel Precast Ceilings fireproof the roof trusses of many theatres, auditoriums and garages.

Genesee Valley Trust Building, Rochester, New York, Voorhees, Gmelin & Walker, Architects, Carl C. Ade, Associate, A. Friederich & Sons Co., Contractors. Gypsteel Precast Ceilings used with open web steel joists throughout.

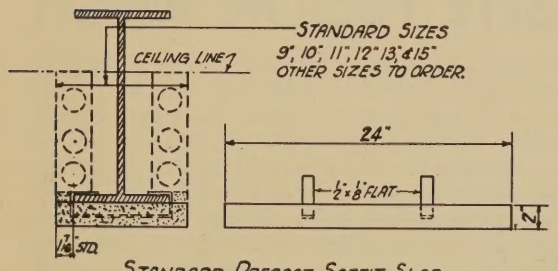
GYPSTEEL CEILING SLABS AND BEAM AND GIRDER FIREPROOFING



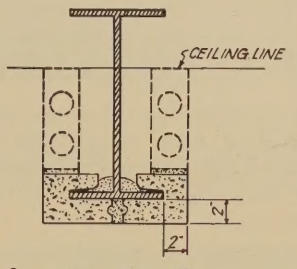
STANDARD PRECAST CEILING SLAB



TYPICAL METHODS OF SUPPORTING GYPSTEEL CEILING SLABS.
OTHER TYPES OF HANGERS AVAILABLE FOR SPECIAL CONDITIONS.



STANDARD PRECAST SOFFIT SLAB



GYPSTEEL SHOE TILE
AVAILABLE IN 4 SIZES TO FIT FLANGE WIDTHS FROM 3" TO 9"

Specification for Ceiling Slabs

All ceilings shall be constructed of Gypsteel Pre-Cast Ceiling Slabs, as manufactured by the American Cyanamid and Chemical Corporation. These slabs shall consist of factory moulded units, 2" thick by 24" wide, by 29¾" long (or 23¾" or 35¾" depending on spacing of supports), reinforced with steel bars running lengthwise and projecting from the ends of the slabs about 1". The slabs shall be hung from their reinforcing by heavy hangers, securely attached to the supporting steel members. All joints shall be solidly filled from the top with gypsum grout.

Specifications for Beam and Girder Fireproofing

The webs and flanges of all beams and girders projecting below the pre-cast ceiling shall be fireproofed by applying to their soffits Gypsteel Soffit Slabs or Gypsteel Shoe Tile, as manufactured by American Cyanamid and Chemical Corporation. Protection shall be at least 2" thick and shall project at least 1½" beyond the flange toes. Sides shall be protected with Gypsteel Partion Tile, 3" thick, hollow (or 2" thick, solid) laid in Gypsteel Block Setting Mortar, and set flush with the outside edges of the Soffit Slabs or Shoe Tile.

GYPSTEEL PRE-CAST COMPOSITE FLOOR ARCH
for buildings of full fire-proof construction

Gypsteel (Pre-cast) Composite Floor Arch is a thoroughly practical and economical fireproof floor construction, free from form work and water, suitable for general building construction, for spans between supporting members up to 8′-0″. It is adaptable to all classes of fireproof steel-frame buildings. As a result of the most rigid fire, load and water test by Columbia University Testing Laboratories, it is fully approved by the building departments of the principal cities for buildings of the first class, and for live loads of 150 pounds per square foot.

It combines, in a practical way, the many advantages and economies of factory-controlled production, with an adaptability that has not hitherto been possible in pre-cast systems. No complicated or special framing is required. It may be installed on precisely the same steel-frame as would be designed for cinder, stone, or slag concrete arches. The only change is a reduction of the sizes and weights of beams, girders and columns, due to the substantially lighter dead load of the Gypsteel Floor.

The weight of the floor arch is 19 lbs. per sq. foot, while the beam and girder fireproofing weighs 10 lbs. per sq. foot of actual area of soffit and haunch.

It consists, essentially, of a composite steel and gypsum beam, spanning the distance and carrying the load between the usual supporting steel I-Beams, combined with standard units of reinforced gypsum, spanning the distance between composite beams, to form the complete arch. Beams and girders, projecting below the floor are fireproofed in the conventional manner with Gypsteel Pre-cast Soffit or Shoe Tile and Haunch Tile.

Gypsteel Composite Floor meets the most exacting requirements of fireproof construction. The gypsum composition, from which the beams and slabs are cast, is not merely incombustible, but possesses a degree of non-conductivity of heat that effectively protects the supporting structural steel work from injury under the most severe conditions of fire. Its low coefficient of expansion insures against self-destruction, or even serious injury, under fire or the subsequent application of water. Under actual tests, the Gypsteel Floor has shown a load-carrying capacity many times greater than normal building requirements, and its action under fire has demonstrated unusual fire-resistive qualities.

SPECIFICATIONS
for GYPSTEEL COMPOSITE FLOOR ARCH

All floors and roofs shall consist of Gypsteel Composite Floor Arch, manufactured by the American Cyanamid and Chemical Corporation.

The floor arch proper shall consist of two elements, as follows:

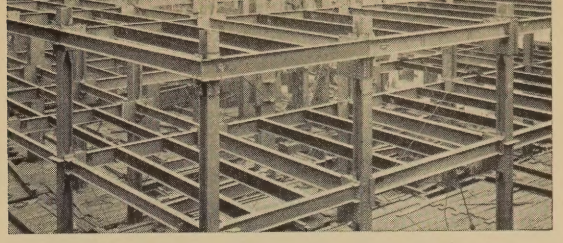
(1) Gypsteel Composite Beams (factory moulded), 3½″ thick, shall be erected in place, about 30″ apart, between the structural beams of the supporting steel frame. The Gypsteel Beams shall be reinforced with two parallel rolled Gypsteel sections of special design, 3 1/16″ in height. These sections shall be placed longitudinally in the Gypsteel Beams with their bottom flanges 2″ above its lower surface and their top flanges projecting 1 9/16″ above its top surface. The sections shall project 1½″ to 2″ beyond the ends of the beam, where they will bear directly upon the supporting steel.

(2) Gypsteel Filler-Slabs, cast at the factory, 3½″ thick by 12″ wide by 30″ long, shall be set in place between the Composite Beams and rest upon the outstanding bottom flanges of the Gypsteel sections reinforcing them.

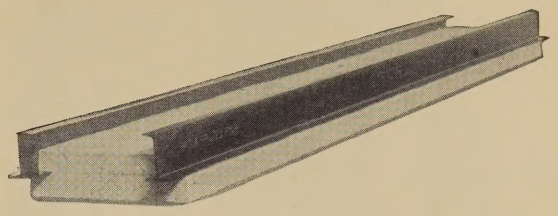
These slabs shall be reinforced with four 1/16″ diameter cold-drawn steel rods. They shall be rabbetted on the underside at their ends so that when set in place their bottom surfaces shall be flush with the bottom surfaces of the Composite Beams. These slabs, in combination with the Composite Beams, whose width may vary between 6″ and 14″ to suit different conditions, shall fill out the rectangular area in each panel. Where slabs may be omitted, such as for pipe shafts, irregular areas, etc. such areas shall be poured with gypsum of the same composition as used in the factory-cast slabs, properly reinforced with rods or mesh.

The webs and flanges of the beams and girders projecting below the Gypsteel Floor shall be fireproofed by applying, to their soffits, Gypsteel Pre-Cast Soffit-Slabs, 2″ in thickness; these slabs containing ½″ x ⅛″ flats, the ends of which shall project through the upper surfaces of the soffit-slabs and shall be clamped over the beam and girder flanges. In place of Gypsteel Soffit-Slabs, the lower flanges may be protected with Gypsteel Shoe-Tile set in place with Gypsteel Block-Setting Mortar Build up the sides of the beams and girders to the underside of the Gypsteel Arch with Gypsteel Haunch Tile (set in Gypsteel Block-Setting Mortar), 2″ thick, solid, or 3″ thick, hollow, flush with the outside edges of the soffit-slabs or shoe-tile.

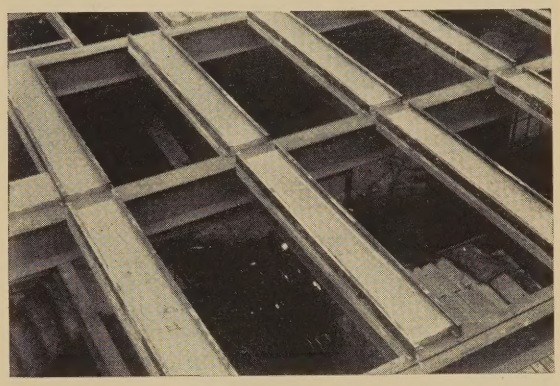
HOW THE GYPSTEEL COMPOSITE FLOOR IS INSTALLED



The photograph at the top shows the arrangement of steel in a typical bay for the Gypsteel Composite Floor Arch. Standard shapes may be used for all sections. Beams and girders are flush top. It is identical in every respect with the framing required for a typical cinder, stone, or slag concrete arch. The only difference is that the much lighter dead weight of Gypsteel invariably *effects a substantial saving in the tonnage of structural steel required.*

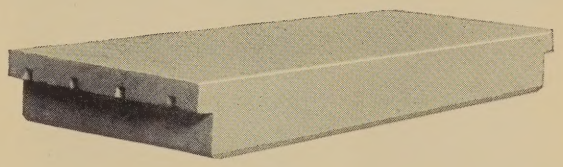


The basic element in the Gypsteel Floor is the Gypsteel Composite Beam. This structural unit is factory-cast, in varying lengths, to suit the actual spans between supporting steel beams, and in 6″ to 14″ widths. The beam itself is a pre-cast slab 3½″ thick, cast from Gypsteel Gypsum, with which is intimately mixed a small percentage of wood fibre and thin planer chips. It is reinforced with two parallel rolled-steel Gypsteel Sections. These sections are placed within 2″ of the bottom of the composite beam and project 1½″ above it. They extend 2″ beyond the ends of the slab.



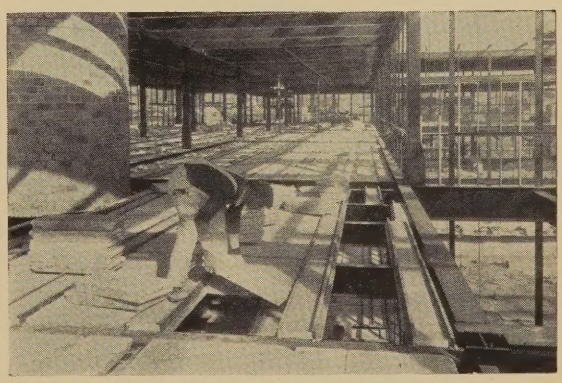
The Composite Beams are set in place about 30½″ on centers, between, and bearing directly upon, the top flanges of the supporting I-Beams. The slab itself finishes 1½″ above the top of the structural steel.

The Gypsteel Filler-Slab is a standard-size machine-made, rectangular unit of the same composition as the Composite Beams. It is 3½″ thick, 12″ wide and 30″ long, and at the ends is rabbetted 2⅛″ deep by ⅛″ wide. It is reinforced with cold-drawn steel rods, properly bent, and of sufficient area to resist the stresses.



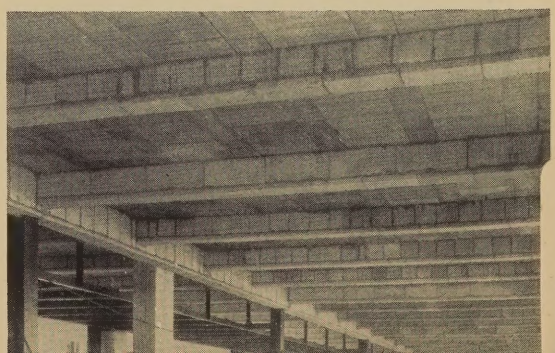
This drawing shows how the Filler-Slabs fit between and rest upon the flanges of the Composite Beams, or Composite Beams and the structural steel girders, to form a straight, level gypsum surface on the underside, ready for plaster.

Here the Filler-Slabs are being dropped into place to complete the Gypsteel Floor. There is no separate reinforcing to handle or tie and no joints requiring grouting. Merely one simple operation. For each job a percentage of Filler-Slabs are furnished with longitudinal bottom scoring, so as to be readily split into individually reinforced pieces 3½″ thick, 30″ long by 2″, 4″ or 6″ wide. These narrow widths are used to fill out evenly, without cutting, the full width of panel. As the fireproofing of the structural I-Beams extends 2″ beyond their flanges, a tolerance of 4″ is available for adjustment with the several combinations. As pointed out in a preceding paragraph, the Composite Beams are manufactured in a variety of widths so that, in proper combination, with the standard-length Filler-Slabs, they will exactly fill the space between any two girders.



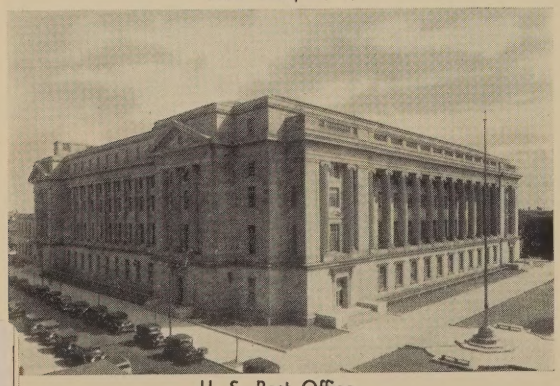
The fireproofing of the exposed webs and flanges of the beams and girders projecting below the bottom of the floor is installed after, and entirely independent of the floor itself. The soffits of the beams and girders are fireproofed either with standard Gypsteel Shoe-Tile, or Gypsteel Soffit-Slabs.

The sides are protected with Gypsteel Haunch Tile, set with Gypsteel Block-Setting Mortar. A complete catalog on Gypsteel Composite Floor Arch is available upon request.



International Building
Radio City
New York, N. Y.

Empire State Building
New York, N. Y.



U. S. Post Office
Newark, N. J.

TYPICAL GYPSTEEL JOBS

GYPSTEEL PARTITION TILE

Where Gypsteel Gypsum Partition Tile May Be Advantageously Used

(1) Non-bearing partitions, walls of corridors, and column covering.

(2) Fire division walls.

(3) Covering for steel members, such as girders, beams, and columns.

(4) Heat ducts and light wells.

(5) Elevator, dumbwaiter, corridor and stairway enclosures.

(6) Wall furring (when split).

Special Advantages of Gypsteel Gypsum Partition Tile

The high quality of Gypsteel Gypsum Partition Tile is due to the combination of purity of the gypsum with a distinctive process of control that insures uniformity in the finished product.

The great purity of gypsum manufactured by the Gypsteel Process at our Linden plant insures a stronger and tougher block, with a minimum waste from chipping and breakage.

The machinery by which Gypsteel Block is made at our Linden plant insures absolute accuracy and produces blocks true to size, accurately proportioned, and of uniform weight, strength and density.

Sizes

All Gypsteel Partition Tile are 12x30 ins. They are furnished in standard thicknesses 2, 3 and 4 ins. solid and 3, 4, 5 and 6 ins. hollow.

WEIGHT PER SQ. FT. OF GYPSTEEL PARTITION TILE

Description of Gypsteel Furring and Partition Tile	Weight tile per sq. ft., lbs.	Weight mortar per sq. ft., lbs.	Total weight plastered one side per sq. ft., lbs.	Total weight plastered two sides per sq. ft., lbs.
2x12x30″ Solid	10.5	1.5	13.5	16.5
3x12x30″ Hollow	11.0	2.0	14.0	15.0
3x12x30″ Solid	13.0	2.0	16.0	19.0
4x12x30″ Hollow	13.0	2.5	16.0	19.0
6x12x30″ Hollow	20.0	3.0	23.0	26.0

Note: Wt. plaster on one side, 3 lb. per sq. ft.

Height

The clear height of non-bearing partitions of Gypsteel tile should not exceed the following:

Nominal Thickness of Tile	*Maximum Height*
2 inch Solid Partition or Enclosure	10 feet
3 inch Solid Partition or Enclosure	15 feet
3 inch Hollow Partition or Enclosure	13 feet
4 inch Hollow Partition or Enclosure	17 feet
5 inch Hollow Partition or Enclosure	20 feet
6 inch Hollow Partition or Enclosure	30 feet

Construction Details and Installation

Our architectural service sheet No. 4 contains complete construction details and specifications and full directions for installation. A copy of this service sheet will be sent on application to any of our offices.

GYPSTEEL GYPSUM PLASTERS

Description and Advantages

The exclusive Gypsteel Process of making gypsum results in a product of great purity and uniform quality. One batch of gypsum made by our process is just the same as another, for *it does not depend for its uniformity upon the percentage of gypsum found in gypsum rock in nature,* which varies greatly. Some of the outstanding advantages of Gypsteel Gypsum Plasters are:

(1) Great Slip and Spread.
(2) Strong and Tough Walls.
(3) Retards Fire.
(4) Uniformity.

Gypsteel Neat Plaster

Requires addition of sand on the job. Most economical on large operations where a good, clean sharp sand is available. Is well fibered for scratch or brown coats over wood lath, metal lath, brick or gypsum and clay surfaces. May be supplied unfibered when desired.

Mixed according to directions, one ton with sand added will cover as much surface as 3 tons of ready sanded plaster.

Specifications. Grounds should be ¾ in. for 2-coat work and ⅞ in. for 3-coat work.

Gypsteel Sanded Plaster

Ready for use with addition of water only. Clean, sharp sand assures a mortar that is smooth and easily worked. Especially recommended in localities where good sand is not available at reasonable prices.

For use on wood lath, metal lath, gypsum tile, brick or clay tile.

Specifications. Grounds and lathing to be same as neat plaster.

Gypsteel Wood-Fibered Plaster

Contains finely shredded wood fiber giving the plaster toughness, flexibility and bulk. Spreads easily and is especially suitable for two coat work. Comes ready to apply with the addition of water only. If desired, equal parts of good, clean sand may be added at the job. Wood-fibered plaster is more bulky than other grades and will cover a slightly greater era.

Specifications. Grounds and lathing same as for neat plaster. Is to be used with or without sand. If sand is added at the job it will accelerate its set, consequently, the mill should be notified how the material is to be used so that proper retardation can be made.

Gypsteel Bond Plaster

Especially made for application to interior concrete ceilings and walls. Gypsteel Bond insures greatest adhesion to concrete surfaces. Used with addition of water only. Walls must be clean and free from dust, oils or efflorescence. We advise cleaning concrete surfaces with a weak solution of muriatic acid, using a wire brush.

Grounds to be of sufficient thickness to bring to a true and even surface—usually ¼ in. Dries to a light gray surface, ready for application of white finish coat or it can be finished by troweling to its natural gray color.

Gypsteel Gauging Plaster

Is manufactured from selected gypsum. It is cool and smooth working and has uniform setting qualities.

For Trowel Finish. Mix approximately three parts of lime putty, by measure, with one part of dry gauging plaster; equal to two parts of dry hydrated lime and one part of dry gauging plaster, by weight. Mix thoroughly; apply in usual manner.

Gypsteel Moulding Plaster

Is an exceptionally high grade and finely ground material. Possesses cool working qualities and assures a clean sharp definition in finished cast.

Gypsteel Prepared Finishes (In Colors)

A ready prepared finish requiring only addition of water. Comes in various colors and tints. Color chart sent upon request. Permits a wide variance in decorative schemes in textured and stippled finishes of all kinds. Colors are lasting.

Specifications. Gypsteel colored finishes require only the addition of water to make them ready for application. Mix thin and in small batches as required. Base coat should be well scratched or broomed before applying finish; walls should be dry.

COVERING CAPACITY OF GYPSTEEL PLASTERS (APPROXIMATE)

Plastering base	Neat, yd. per ton	Wood-fiber, yd. per ton	Sanded, yd. per ton
Wood lath	190 Sanded 2 to 1	115 Unsanded	65
Metal lath	110 Sanded 2 to 1	90 Unsanded	40
Plaster board	200 Sanded 2 to 1	60 Unsanded	75
Gypsteel tile	200 Sanded 3 to 1	140 Sanded 1 to 1	65
Clay tile and masonry	175 Sanded 3 to 1	110 Sanded 1 to 1	50

Full Line of Plasters

Gypsteel Gypsum Plasters are supplied for all uses —Neat, Sanded, Wood-Fibered, Gauging, Moulding, Bond Coat for application to concrete, Colored Finishing Plasters, Finishing and Mason's Hydrated Limes and Super-Tex Plastic Paint.

All Gypsteel Gypsum Plasters are shipped in strong paper bags or jute sacks marked with a large diagonal green stripe for easy identification.

Ask for Service Sheet No. 6 giving complete specifications and other useful information.

GYPSTEEL COLORED PLASTER AND SPECIAL NEAT

Gypsteel Colored Plaster produces a colored self-decorating and wear-resisting finish affording wide latitude in decorative and color effects. Beautiful, sanitary and economical — no paint or other wall treatment is required. Is ready prepared requiring only the addition of water. Can be floated, finished with a stencil roll or in light and heavy textures, and also as a travertine or caen-stone.

Eight standard shades—only the highest grade mineral color pigments used, assuring definite lasting qualities.

To bring out the real beauty and permit of proper floating or texturing of colored finishing plasters, Gypsteel Special Neat Plaster should be used as the base coat.

▼

VELACHROME

A textural plastic paint possessing spread, adhesion, hiding power and ease in texturing. Adheres perfectly and permanently to any firm surface. Easy to apply—requiring only the addition of water. Economical—can be used in new or old construction.

Eight standard shades and white.

Velachrome assures a durable surface that can be washed when glazed, and has texturing possibilities of infinite variety, color and character.

▼

WALLBOARD AND PLASTERBOARD

We offer in Gypsteel Wallboard, Plasterboard and Gypsum Lath distinctive and outstanding quality products. The plaster core is an admixture of Gypsteel Processed Plaster and granular cork—does not warp or buckle and is flexible. The cork adds to its insulative value.

Processed paper used in the board provides a finished surface or an excellent surface for decoration, including paint, texture or wallpaper. The gypsum lath and plasterboard affords a lathing that does not expand or contract.

It is fire-safe and insulative—the ideal plaster base.

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